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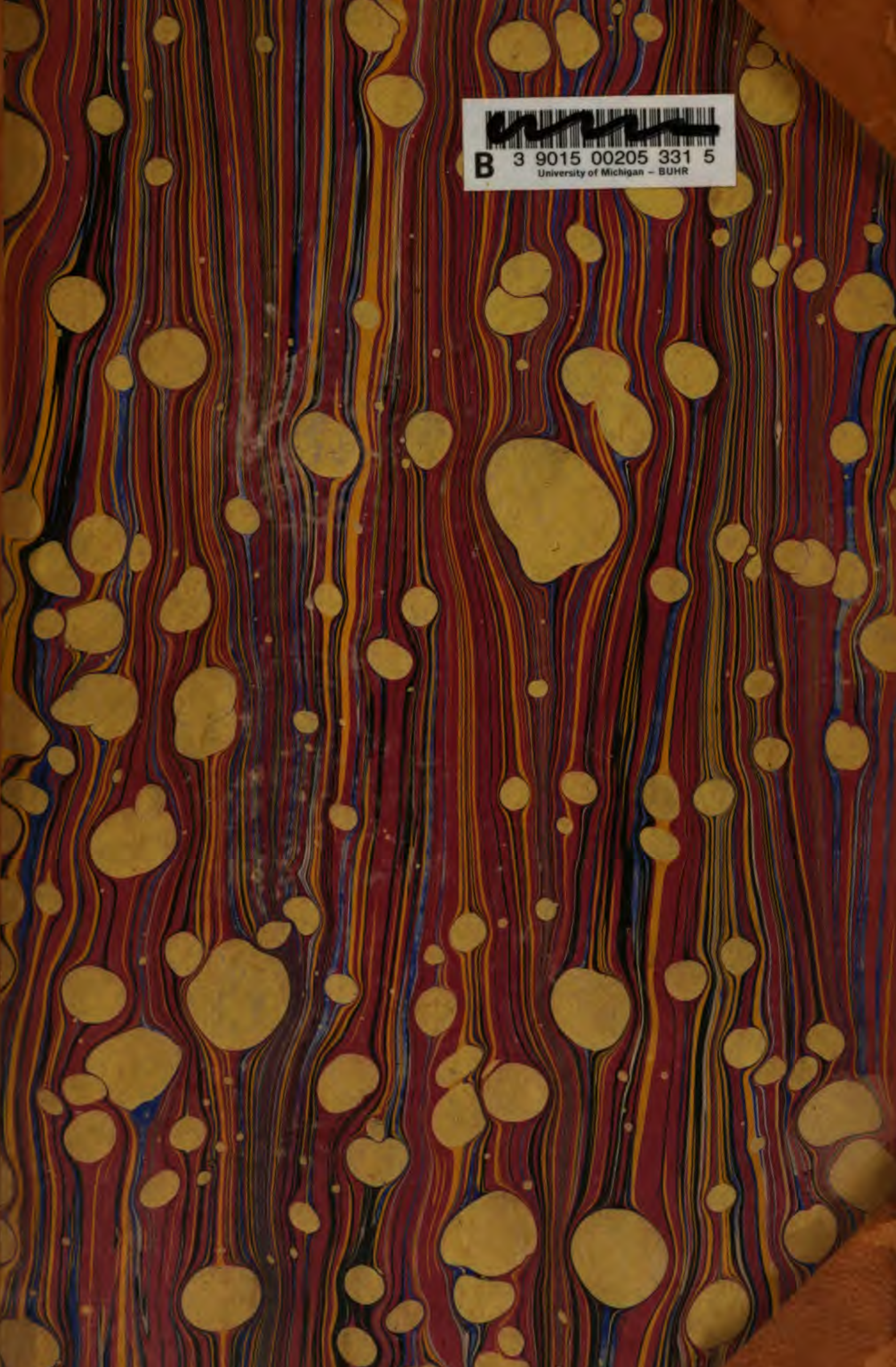

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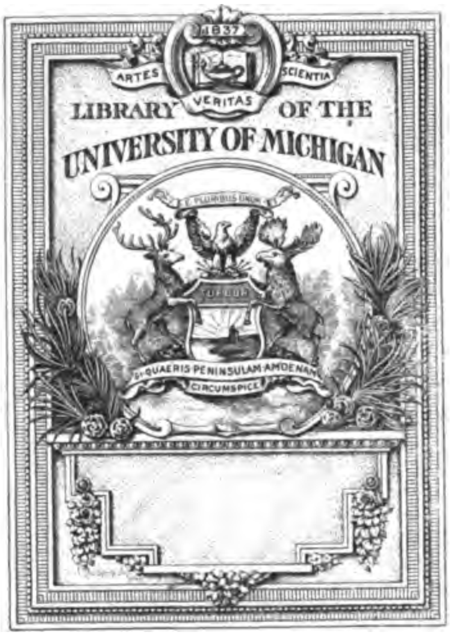

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EDITED BY

STEPHEN SMITH, M.D.

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REPORTS FROM THE FOLLOWING HOSPITALS, INSTITUTIONS, AND SOCIETIES, HAVE APPEARED IN THIS VOLUME.

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Original Lectures.

A COURSE OF LECTURES ON CHANCRE,

DELIVERED AT THE BALTIMORE INFIRMARY.

BY

WILLIAM A. HAMMOND, M.D.

PROFESSOR OF ANATOMY AND PHYSIOLOGY IN THE UNIVERSITY OF MARYLAND, SURGEON TO, AND LECTURER ON CLINICAL SURGERY IN THE BALTIMORE INFIRMARY.

Lecture I.

Gentlemen:—I propose making use of the large amount of material which the Infirmary affords for illustration, by delivering to you a series of practical lectures on venereal diseases. I shall not occupy your time with any extensive remarks on the history of these disorders, neither shall I stop to combat views which I hold to be erroneous, nor to eulogize others which may be more in consonance with my own; but I shall endeavor to describe to you the affections in question as they actually exist, and to give you concisely and clearly the opinions which, after much reflection and no small amount of experience, I have been induced to form in regard to them. In so doing, it is very far from my intention to give you mere descriptions, but I shall try to make you practically as well as theoretically acquainted with the various phases under which venereal diseases are manifested, and this, as you have already had abundant opportunity for observing, can be readily accomplished so far as the number and variety of cases are concerned. In fact the Infirmary has always been one of the best schools for the thorough study of the important and interesting class of diseases under consideration which the country possesses.

The history of the venereal poison is certainly very interesting, but at the same time extremely unsatisfactory. In truth nothing definite in regard to its origin has been ascertained, but as is usual in such cases conjectures are innumerable. According to one party it is coeval with man; another thinks it originated in the French army before Naples, during the latter part of the fifteenth century; and a third attributes its appearance in Europe to the importation of the disease from America, by the followers of Columbus. This last view has, however, been positively disproved, and the second is doubtless as little entitled to confidence. Still other theories have been broached. One assumes that it is constantly originating from impure connections, a very unphilosophical assumption; and M. Ricord, anxious apparently to cap the climax of absurdity, holds the view that it originated a long time ago from some beast of a man having connexion with a mare affected with glanders. Prof. Mott, of New York, thinks that leprosy, struma, and syphilis, are primarily identical, the first being the parent of the others; but as far as I am aware he has adduced no evidence to support the idea.

My own opinion is, that these diseases are of great antiquity, for we find constant reference to them in the older writers, and even in the Scriptures you will discover allusions to affections which in our day we should call venereal. If you desire to study this point you can do so from almost any of the systematic works on the subject.

One thing we do know, viz. they are more frequent than any other diseases; one-third of the population of civilized countries, men, women, and children, being subject to some one or more of the manifestations they produce, either primary disease, constitutional syphilitic affections, or others which have been transmitted to them by hereditary influence.

Is there more than one venereal virus? You have already discerned from the remarks which from time to time I have made to you, relative to cases under treatment, that I admit two species of venereal poison. 1st. That which gives rise to a simple, non-infecting, soft chancre, and 2d. That which causes an indurated one, liable to be followed by constitutional syphilis. Besides these, we have two kinds of virulent gonorrhœa; one caused by the deposit of the matter of a soft chancre on a secreting mucous surface, and another due to the contact of the pus of an indurated chancre with such a surface. These are all the varieties of infectious venereal diseases which I am able to recognise as primary disorders, and I think I shall be able to demonstrate to you the fact that these species do actually exist.

Are the two primary kinds of poison I have mentioned convertible one into the other? By no means; they are essentially distinct. The virus of a soft chancre cannot give rise to an indurated chancre, nor the virus of this latter to a soft chancre. Each inoculates with its own specific poison, causing a sore of the same character as the parent chancre. The two differ very essentially in their appearance and in the consecutive phenomena which may occur, and it is exceedingly important, as I shall point out to you, that you should be able to recognise these differences.

I am aware that in holding the view that gonorrhœa is primarily due to the deposit of chancrous virus upon a mucous surface, I am contending against many of the most eminent syphilographers who have written upon the subject. I am not, however, alone; and if I cared to do so, might bring forward many names familiar to you in support of this opinion. I have, however, adopted the theory in question from facts which have come under my own personal knowledge, and not because it was held by some one else. We will consider this whole matter more in detail when we come to the subject of gonorrhœa, and I shall then bring forward the facts and arguments upon which my views are based.

I have said that there are two kinds of chancre, the soft and the indurated. Let us proceed at once to the consideration of these species of venereal ulcers; and first of the soft chancre. A soft chancre does not appear immediately after an individual has had connexion with another affected with this variety of venereal disease. A period varying from two to fourteen days always follows, during which no evidence of having become diseased is present. At some time within the period I have mentioned, generally on the fifth or sixth day, a small pustule is observed for instance near the frænum, or a small abraded surface secreting a discharge is for the first time perceived. If the surface was intact when the virus was deposited, the first form, the pustule, follows; if on the other hand an abrasion or a fissure existed, so that the part to which the virus was applied was deprived of its epidermis, the second form ensues. Recollect these two different modes of origination. The pustule is never found unless the virus has been applied to a surface in a state of integrity, nor the superficial ulcer unless the epidermis has in some manner been previously removed. Let us suppose we have the pustule to deal with. An itching of the part is generally felt a short time before any elevation of the epidermis is perceived. This is not, however, as some suppose, an invariable antecedent. A small pimple or pustule is next seen. This is of variable size, usually not larger than a small pea, and generally considerably smaller. This pustule in two or three days breaks, or the head is rubbed off, and thus an ulcer is produced. The latter may be of almost any form, but generally it is round or ovoidal; the edges are perpendicular; it is generally but not always deep, and the bottom of it presents a dirty grey appearance, is rough, and sometimes excoriated into little holes. The pus which flows from it is generally of healthy character, but is sometimes thin and discolored with blood. The ulcer does not remain of its primitive size; it spreads, enlarging equally in all directions, and in ordinary cases, after attaining the size of a dime it ceases to grow. In a few days it commences to cicatrize. A grey somewhat hardened border forms around it, and gradually diminishing in size, at the end of about four weeks it is entirely healed.

Such, gentlemen, are the appearances and characteristics of a simple or soft chancre, as ordinarily met with. The deviations I shall afterwards point out. There is one important feature, however, to which I have purposely not yet alluded, and that is the *softness of the base*. When the thumb and finger are applied to opposite sides of the chancre, no induration is felt; the base is perfectly soft, yielding readily to the slightest pressure, and scarcely distinguishable, so far as the touch goes, from the same part of the body in a normal condition.

Now this is a most important feature—one by which the simple or non-infecting chancre may be most readily distinguished from the other form, the indurated or infecting variety—and I cannot too strongly impress upon you the necessity of your making yourselves thoroughly acquainted with the *feel* of these ulcers. The non-infecting sore, in its natural condition, never has an indurated base. It is essential, however, to recollect that an appearance of induration may sometimes be present. Thus if much inflammatory action exists, there may be phlegmonous hardening, such as is felt at the base of a boil; but as Ricord remarks, this, though readily distinguished from specific induration by the experienced touch, cannot in words be separated from it. Another form of hardening may be given to the base of a chancre, by the use of the various washes which are employed, but this also cannot in competent fingers be confounded with the true induration. I only mention these facts now in order that you may be reminded of their existence, but will dwell more particularly upon them when we come to the diagnosis of indurated chancre.

A soft chancre is generally solitary, but not unfrequently two or more are present. This is another diagnostic mark of some value, for an indurated chancre rarely has a fellow.

In situation it may be anywhere, except perhaps upon the head and face. It has not yet been detected upon these parts of the body, which is certainly a very singular circumstance. A chancre, therefore, on the head or face is always indurated.

A soft chancre is much more contagious than an indurated one. It is for this reason that they are more frequently met with. Four-fifths of all the chancres which occur are of the simple non-infecting kind.

The pus from a soft chancre, when submitted to microscopical examination, is seen to be constituted of regularly formed pus-corpuscles, floating in a homogeneous fluid. When these are acted upon by acetic acid, a nucleus is brought into view, just as in ordinary pus-corpuscles. Occasionally a few red blood-corpuscles may be present. The secretion from an indurated chancre is of a different microscopical appearance.

Inoculation affords us a ready means of determining the character of the chancre. A small portion of the pus of a soft chancre inserted into the thigh (for instance) of the diseased individual causes the formation of another chancre of the same kind: provided always (and it is important to recollect this fact) the original chancre is not far advanced in the process of healing. If, having reached its height, it has diminished considerably in size, the matter from it will not cause another chancre. At this stage it has lost its specific character, and has become a simple non-contagious ulcer, incapable, physiologically or artificially, of any longer propagating its species. You will remember that a short time since I performed inoculation with the pus of a soft chancre in process of healing, and with a negative result. I have frequently known men have connexion with females under my treatment who were affected with healing soft chancres without contracting any disease, and I have often known men affected with chancres of similar character and condition, have sexual intercourse with women with perfect impunity to the latter.

But there is another feature, a very important one—one for the mention of which you are already prepared, and that is, that the soft chancre is essentially a local disease, never infecting the system, and consequently never producing those horrible constitutional ravages which are frequently met with as sequences of the indurated chancre. You perceive, now, how necessary it is for you to be able to make a correct diagnosis, not only with a view to proper treatment, but that you may at once relieve the mind of your patient of the terrible apprehensions he generally experiences.

In a subsequent lecture on the duality of the venereal poison, I shall enter at length into this subject.

But if the soft chancre does not infect the system, it produces other effects which sometimes are scarcely, if at all, less calamitous. It is that form which is pre-eminently liable to inflammation, ulceration, and phagedena; the latter, when unchecked, the most terrible complication which attends venereal diseases. To these modifications of the course of the simple chancre, I now ask your attention.

A soft chancre is liable to be attacked with an excessive amount of inflammation. In such cases, the appearance of the ulcer is materially modified, and the surrounding tissues become swelled, painful, and hot. The chancre itself, instead of retaining its rather indolent characteristics, assumes a deep red color, or it may be changed to a purple hue from excessive congestion. The secretion from its surface becomes thin and acrid, excoriating the parts over which it flows, and giving rise during the first period of the inflammatory action to fresh chancres. If the process is not arrested, gangrene and consequent sloughing of the affected parts may ensue.

Now, one of the chief causes of this complication is the application of irritating substances, such as corrosive acids, nitrate of silver, sulphate of copper, etc., to a chancre which ordinarily would do very well without them, or in which more efficient cauterization is required; but the most frequent is deficient stamina in the individual affected. This may be due to debility, dram drinking, or to the inordinate use of mercury. Again, if the chancre is situated upon the frænum or corona, by impeding the retraction of the prepuce the discharge may accumulate around the glans and give origin to the extra-morbid process; or it may be due to mechanical irritation, friction against the clothing, or during coition. I have frequently found both these latter causes the active agents. In cavalry soldiers who, during long marches, are obliged to spend several hours each day in the saddle, chancres which are doing well will become inflamed and cause a good deal of subsequent trouble. A man who entered the Infirmary a few weeks since, and who is still in the house, you will recollect, caused a high degree of inflammation in a soft chancre on his prepuce by tying a string around his penis.

The specific character of the chancre is lost if the inflammatory action continues longer than four or five days. This fact has been ascertained by many observers, and I have had abundant opportunity of determining the point, both by inoculation, and by observing that individuals so affected did not communicate chancres to others with whom they had sexual intercourse. A Mexican woman who was under my care, with a large inflamed chancre at the fourchette, had connexion in one night with seven dragoons, all of whom escaped disease. A soft chancre may become the seat of excessive ulceration without there being any increased inflammatory action. Under such a condition, the chancre generally enlarges, and may attain an enormous size, unless checked. When it heals at one border and enlarges at the other, the ulceration is said to be serpiginous. You have recently had several opportunities of witnessing this complication. It is one which is difficult to treat successfully unless constant watchfulness is exercised, and prompt, active treatment adopted.

The chancre attacked with excessive ulcerative action is still capable of being inoculated. I have several times satisfied myself of the truth of this assertion. Ricord mentions a case on the authority of M. Puché, in which a serpiginous chancre yielded considerable pus after lasting three years.

Lastly, we have phagedena as a complication of soft chancre. This is almost always due to some constitutional cause, to intemperate habits, excessive sexual indulgence, bad food and air, but above all to the influence of mercury. When I was in the army and stationed in New Mexico, I witnessed many terrible cases of phagedenic chancres. Most of them were due to the effects of mercury. Medical men were scarce, and persons who contracted chancres were in the habit of treating themselves, and always with mercury, which they took till salivation was produced, and frequently for a longer period. Many cases were due to excessive sexual indulgence, the cause being doubtless rendered more effective from the fact that the Mexican women were excessively filthy, and had intercourse with any one who chose to ask them. With soldiers who were kept under greater restraint and who were not treated indiscriminately with mercury, phagedena was not met with in anything like the same proportion of cases as in citizens.

In phagedena the surface of the chancre becomes dark, sometimes almost black. A purple areola surrounds it, the discharge changes to a dark-colored ichor, which excoriates the parts it touches; the ulcer enlarges with great rapidity, and the tissues in the neighborhood break down and disappear more rapidly than under the influence of simple ulceration. Arteries are exposed, and dangerous hæmorrhage may thus be caused. In one case which came under my observation the femoral artery was perfectly denuded as far as the middle of the thigh, and in several places a probe could be passed down to the femur. The genitals are often entirely destroyed, and I knew of one case in which the anterior wall of the abdomen was perforated, giving rise to peritonitis. There is no limit to the action, except the power of the patient to survive under such extensive destruction. As you can readily perceive, the constitutional disturbance is often excessive, and is always well marked. There are debility, fever, and eventually hectic, and at last the patient, completely worn out, succumbs.

The prospect of recovery depends altogether upon early and prompt treatment. If seen in its early stage and properly dealt with, especially if the mercurial cachexia is not present, phagedena can generally be arrested; but under other circumstances it terminates sometimes speedily, sometimes slowly, but always surely in death.

The secretion from a chancre attacked with phagedena is frequently inoculable, though I have often failed in obtaining positive results. The resulting chancre is liable, if produced upon the diseased individual, to assume a phagedenic character, but not if a healthy person is used for the experiment.

Another occasional accompaniment of the soft chancre is bubo. This, as ordinarily understood, is an inflammation and enlargement of a lymphatic gland of the groin. In the bubo you have, as M. Ricord has very clearly shown and as my experience also establishes, a valuable means of discriminating between the two species of chancre. The bubo attendant upon the soft chancre is not constant, and may depend upon either of two very different causes. It may be either a simple inflammation of a lymphatic gland, due to the irritation produced by the ulcer—just as a corn on the foot causes a swelling in the groin or one of the hand an enlargement of a gland of the axilla—or it may be caused by the direct absorption of the virulent pus from the chancre. Thus there are two essentially distinct species of bubo liable to be produced by the variety of venereal sore under consideration.

The situation of both is the same, being always in the superficial glands of the groin, but the character and progress of the two differ materially. That which is due to simple inflammation may terminate in resolution or it may suppurate. In the latter case, it heals kindly and does not furnish pus which is inoculable. The virulent pus has not caused it, it is simply symptomatic, and it may occur at any period during the existence of the chancre.

The other form of bubo which may attend a soft chancre is, as I have stated, due to the absorption through the lymphatics of the pus of the chancre. It is therefore specific, and the pus from it, when inoculated, gives rise to a chancre of the simple or non-infecting kind. It differs also from the simple adenitis in the fact that it always suppurates. If allowed to open spontaneously, or if it be incised, the edges of the wound become chancrous, and the ulcer liable to all the accidents, especially phagedena, to which the soft chancre is subject.

It may occur at almost any period. Ricord mentions a case, which he quotes from M. Puché, in which three years after the commencement of a soft chancre, a bubo furnishing inoculable pus was formed. The longest period I have witnessed is seven months. In this case a bubo formed, with the pus of which I caused several simple chancres on different persons, seven months after the commencement of the original chancre. The edges of the wound made in opening it became chancrous, and as it exhibited a strong tendency to ulceration, the ulcer was cauterized with nitric acid. It healed slowly, and five years afterwards the man was in good health.

I shall return to the subject of bubo in a subsequent lecture, and will then consider the whole matter more in detail.

To recapitulate: we find that the soft chancre is a local disease, that it never infects the general system, that it may be inoculated if the process of reparation has not advanced far, and this upon the patient affected—that it is the kind of chancre pre-eminently liable to complications, such as inflammation, ulceration, and phagedena, and that it is occasionally accompanied or followed by two kinds of bubo, one a simple symptomatic adenitis non-virulent, the other caused by the absorption of chancrous pus, always suppurating, and the pus found being inoculable, and therefore truly of a specific character.

In the next lecture we will take up the treatment of this form of venereal disease, and I now proceed to bring under your immediate observation cases illustrating the points touched upon this morning.

Original Communications.

REMARKS ON THE EXPERIMENTS OF THE LATE PROFESSOR TULLY ON THE EFFECTS OF CHLORATE OF POTASH.

By CHARLES A. LEE, M.D.,
PROFESSOR OF MATERIA MEDICA.

As many have condemned the late E. J. Fountain, M.D., for presumption and fool-hardiness, if not actual ignorance, in taking an ounce of the *chlorate of potash* by way of experiment in a single dose, you will oblige his friends and doubtless the profession generally, by republishing, from the sixth volume of the *Boston Medical and Surgical Journal*, some experiments by the late Professor Tully and his students, in which *they took ounce doses of this article in several instances with entire impunity.* In experiments Nos. 4, 8, 12, one ounce was taken, in several others half an ounce; and it is somewhat remarkable that from the results of twelve experiments, closely observed, Dr. Tully concluded that "the chlorate of potash possesses between a quarter and a third of the medicinal activity of the nitrate of potassa" (*Ibid*, p. 341), also that "the operation of this salt appears to be precisely similar, not only in kind, but even in degree, to the effects of potassa and soda." He further remarks that, "when used in a large quantity at once, or within a short period, though short of the amount that will occasion what is called actual poisoning, each of these salts" (carb., nit., and chl. potassa), "produces a soft and feeble pulse, great flatulence, and often cardialgia, uneasiness and strong sense of load and weight, or distension in the epigastrium, gradually increasing to a steady pain, like the beginning of colica ileus, with intolerance of pressure, progressively extending to the umbilical region, and even to the whole abdomen, subsequently becoming extremely acute and lancinating, the time of action and tenderness augmented in proportion to the severity and continuance of the pain, and sometimes attended at last with severe vomiting, and more or less spasms" (Loc. cit., p. 342).

Dr. Tully's opinion, also, as regards the therapeutical action of chlorate of potassa, is worthy of notice. "It is my opinion, therefore," he remarks, "that, as respects medicinal powers, this article is a pure reducing antiphlogistic, or refrigerant remedy, *i.e.* it directly reduces vital energy and strength of action in the arterial system, and of course relieves phlogistic diathesis. My colleague, Professor Ives, has formerly told me, that according to his observations, this salt certainly diminishes the heat of the body. This corresponds perfectly with my observations in regard to its effects in the treatment of phlogistic diseases, and even in some cases where the heat has been purely irritative, not being connected either with entony on the one hand, or any positive atony on the other." Dr. T. rejects the notion that chlorate of potassa imparts free oxygen to the blood, and states that it is now (1832) fully ascertained that it is of no service in syphilis, scurvy, cutaneous diseases, or any analogous affections; that it is in no sense a tonic; but "there is abundant reason to conclude that the febrifuge powers of this salt are in analogy with *tartrate of antimony*."

My own experience in regard to its medicinal properties correspond very closely with those of my friend, Dr. Hanbury Smith, in a recent number of the Medical Times. It is a valuable alterative and tonic, in certain cases, though I doubt very much whether it acts chemically by supplying oxygen to the system. Very probably its modus operandi will yet be found to be similar to that of other tonics, which primarily impress the digestive organs, secondarily, the nervous centres.

"Exp. IV.—January 21, at four o'clock P.M., pulse at 80, an ounce of the salt was taken. In an hour, the pulse was reduced in frequency to 64. In another hour, the pulse was found varying from 56 to 65, a little exertion or motion instantly raising it to the latter number, and quiet for a sufficient time reducing it to the former. It was at the same time considerably smaller and weaker. In another hour—i. e. at seven o'clock P.M.—the pulse, as respects strength and fulness, remained stationary, but its medium frequency was 64. At eight o'clock, the pulse remained as at seven. Shortly after this last dose of the salt was taken, a sensation of weight, fulness, and distension, in the epigastric region, began to be felt, which regularly and gradually increased, and was attended with a sensation of twisting, till about ten o'clock P.M., when it had become so inconvenient, that about two fluid ounces of French brandy were taken, which, as was expected, greatly relieved it. Through the whole afternoon there had been also a very troublesome degree of flatulence, which increased with the other symptoms, and continued after they were relieved. There was likewise a moderate degree of cardialgia. Sleep, the night following, was much as usual; but on the succeeding day (Sunday), there was a recurrence of the load and distension in the epigastrium, and of the sensation of twisting, which now amounted to rather severe pain, but which subsided, without medication, towards night. On the next day still following (Monday), these symptoms again recurred, and to such a degree as in fact to require medical relief. In the course of Tuesday, the same symptoms still continuing, three doses of opium, of a grain each, were taken at different times, with the desired effect, viz. the production of relief. On Wednesday one grain of opium proved sufficient, and subsequently no more was taken, though much flatulence, and, at times, considerable uneasiness in the epigastrium, with deficiency of appetite, continued through the week. Indeed, whenever food was taken, even in very moderate quantity, it had a strong tendency to produce disturbance and distress; and, for several weeks following, the subject of these experiments had proetica marisca, which he had never experienced before. It should have been before stated, that, in the course of the afternoon and night after the last dose of the salt was taken, there was a considerable increase of the urinary discharge, which was at an end the next morning."

"Exp. VIII.—January 21, at four o'clock P.M., the pulse at 72, and in other respects natural, an ounce of the salt was taken. In an hour, the pulse was reduced in frequency to 56 in a minute, and was considerably smaller and weaker than natural. In another hour (six o'clock P.M.), the pulse was still 56, when perfectly quiet, but by a little exertion and motion, it would rise to 64. In other respects, it remained as at the last hour. At seven o'clock, the pulse was still at 56, and the same in other respects. At eight o'clock, the pulse was only 48 in a minute, and was even still smaller and weaker. In the course of the last hour there was a copious alvine evacuation, which resembled the operation of a full dose of a refrigerant purging salt. It is to be observed, that during the same day there had been the customary natural evacuation from the intestines. Between eight and nine o'clock, walked about an eighth of a mile, and immediately, on returning, felt a severe, heavy, and oppressive pain, and a sense of sinking in the stomach, so urgent as to require speedy mitigation. At this time, the pulse was only 36 in a minute, and there was moderate sweating. Now took two fluid ounces of undiluted French brandy, which gave immediate relief, that continued through the night, during which the sleep was quiet. On the morning of the 22d, a sense of weight, with some pain, was again felt in the region of the stomach, for which an ounce of undiluted French brandy was taken, with immediate benefit; and, apparently in consequence of this, the appetite for breakfast was much as usual, and the customary quantity and kind of food was accordingly taken. But soon after breakfast the same symptoms began to return, and they gradually increased till about eleven o'clock A.M., when they had become so severe as again to require medical relief. At this time, about a grain of opium was taken, which was productive only of moderate and temporary respite; for after no very long time the same sense of weight and distension in the stomach, and the same pain, were again urgent. At twelve o'clock M., half a tumbler of wine was taken, with so much relief as to allow of the ordinary dinner, though, as there was considerable thirst, an unusual quantity of water was taken with it. Before long, however, the old symptoms returned, and they soon increased to such a degree, that a dose of opium, about twice the size of the last, was taken, but without any appreciable abatement of the complaint. By two o'clock P.M. the morbid symptoms had become so urgent, that it was deemed necessary to call on the professional gentleman who superintended the experiments. The exertion and motion of walking about three-fourths of a mile, to his house, very greatly aggravated the distress and pain. It had now extended to the umbilical region, had become lancinating, and extremely severe, resembling neuralgia, and there was tumefaction, hardness, soreness, and intolerance even of the lightest pressure, in both the epigastric and umbilical regions, with inability to sit erect—the whole accompanied with much flatulence, and frequent eructations of air. A free use of opium was immediately entered upon, which soon produced some benefit; but perfect relief was not obtained till about five o'clock P.M., when full twenty grains of the remedy, accompanied with a little essential oil of cinnamon, had been taken. After this period, when perfect rest was maintained, there was complete freedom from pain; and the tumefaction, hardness, and intolerance of pressure, rapidly disappeared. Exertion and motion, however, would produce a slight return of the pain, but in a trifling degree. About nine o'clock P.M., a moderate paroxysm of vomiting took place, by which, to all appearance, the food taken at noon, and probably considerable of the water which was swallowed with it, were rejected in a partially digested state. Not very long after this, went to bed, and had a perfectly quiet and comfortable night's rest, and on awaking, on the morning of the twenty-third, felt entirely well. On getting up and dressing, however, experienced some vertigo, but not sufficient to prevent walking three-fourths of a mile to lodgings. On arrival there, again felt vertigo, and lay down on a bed. After a little rest, felt completely recovered, and at dinner had a good appetite, though indulged it moderately. At supper time, was so well as to crave and take animal food, after which, spent the evening in study and writing. No trace of indisposition of any sort was perceived the ensuing week. It is worthy of remark, that though there was no alvine evacuation on the twenty-third, yet that, early on the twenty-fourth, a natural one took place, and there was no subsequent derangement of this function."

"Exp. XII.—January 21, at four o'clock P.M., pulse at 72, an ounce of this salt was taken. Under the influence of this dose, there was no subsequent change in the frequency of the pulse, but there was an obvious and unequivocal diminution, both in its fulness and force, commencing within an hour, and continuing through the evening and night. The same sensation of weight and oppression, that has been previously described, also took place within an hour, but in a considerably greater degree than before; and it was likewise accompanied with more cardialgia, and more flatulence. In the course of the evening, and about three hours from taking the salt, the sensation of weight and oppression, in the region of the stomach, increased to a steady and uniform gravative pain, which at last became so urgent, that a grain of opium was taken. Just about the time the opium was taken, there was nausea, and four or five efforts to vomit, though nothing but air was ejected. During the evening there was frequent micturition, and a discharge of nearly double the quantity of urine, with considerable of that sort of irritation about the bladder and urethra, which the subject of the experiments distinctly recollects having formerly experienced, not only from nitrate of potassa, but also several times from the carbonate of potassa, when he has used it freely. The grain of opium, in the course of about an hour, much relieved the immediate urgency of the pain in the stomach, but did not by any means remove it. As in each previous experiment the salt had been taken upon an empty stomach, so in this all supper was omitted till between nine and ten o'clock P.M., when half a dozen wine biscuit, with about two fluid ounces of brandy, diluted with water, were taken. The brandy was used because the gastric distress had again amounted to so much pain as to require some mitigation, which it gave, in about an equal degree with the grain of opium that had been previously taken. Between ten and eleven o'clock P.M. the subject of this experiment went to bed, but was unable to sleep for several hours, on account of the flatulence and the gastric distress. About midnight, the same sort of pain in the stomach, as above described, had increased to such a degree as again to require relief, and there was likewise a strong sensation of weight and tension in the umbilical region, with considerable pain, much resembling the commencement of colica ileus, or common colic. At this juncture, two and a half grains of opium were taken, which, in the course of an hour, reduced the symptoms, in the epigastric and umbilical regions, to the sensation of load and oppression, which had not disappeared since their commencement. From about two o'clock to six A.M., the subject of this experiment slept well, but then awoke with the same sensation about the stomach and abdomen. At breakfast, had little or no appetite, but, nevertheless, ate moderately. For three or four days subsequently, it was necessary to take about three or four half-grain doses of opium daily, because, without, there would be a return of flatulence, sense of distension, oppressive weight, and even considerable pain, both in the epigastric and umbilical regions, and this to quite an inconvenient extent. Even to the end of the week, more or less of the same symptoms would constantly occur, unless subdued by a little opium; and during the whole of this time, there was deficiency of appetite, except when under the influence of a moderate quantity of opium. It is worthy of remark, that although no costiveness followed this last dose of the salt, and none was produced by the little opium which was taken, yet a troublesome degree of proetica marisca took place immediately, and had not subsided by the first of February. The fæces were lighter colored than natural during this period. It is also worthy of remark, in this case, that neither the opium nor the brandy produced any of the ordinary operative effects that might have been expected, had they been taken by a person perfectly well, and not under the influence of any other medicinal agent. The subject of this experiment well knows, from repeated trials formerly made, that he could not have taken three and a half grains of opium, in the manner which he did at first, without vertigo, headache, nausea, etc., the next day, unless where there was disease, for the relief of which the force of the opium should be spent; or where some counteracting agent to the effects of opium had possession of the system. It may be necessary to mention here, that the weight employed for the doses of this salt was Troy weight, and not Avoirdupois, which latter, I believe, is generally used by druggists, in many parts of our country, for all quantities above two drachms."

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CONTRIBUTIONS TO THE NATURAL HISTORY OF "INSOLATIO,"

CHIEFLY FROM THE MEDICAL RECORDS OF HER MAJESTY'S FORTY-THIRD LIGHT INFANTRY.

By E. H. JANES, M.D.

Perhaps there is no class of persons possessing greater facilities for investigating and describing that singular and fatal affection from protracted exposure to extreme heat, to which the terms coup-de-soleil, sun-fever, heat-apoplexy, and insolation, have been applied, than the British Army Surgeon who has been long in active service in India. The second number of *The Madras Quarterly Journal of Medical Sciences* contains two elaborate articles upon the history and nature of this disease; one of which, under the caption at the head of this article, by Dr. Alexander Barclay, Surgeon Forty-third Light Infantry, contains the carefully recorded results of a long personal experience in different locations, and under a variety of circumstances. In the literature of the subject we find the disease described under different names, and with such a variety of views with regard to its pathology and treatment, that little is gained by reading, save the conflicting opinions of various authors, describing the same disease by different names, as seen in different localities, under different circumstances, and modified by accidental causes. In order to eliminate that which is accidental, from that which is essential in its symptoms and progress, it is necessary to carefully compare the separate accounts given by independent observers, when we shall find that whatever may be the difference in accidental complications, there is something common to all cases; the writer's observation happily illustrates this idea.

The first cases that came under Dr. B.'s notice occurred in the beginning of the year 1845, on the frontiers of South Africa. "In the glorious climate of that colony such cases are extremely rare, and, as a general rule, long exposure at any period of the day, and at any season, is not attended with the slightest degree of danger." Several cases, however, occurred, during a lengthened period of service, all of a mild character, no fatal case having been seen or heard of. The patient, previously in perfect health, would fall suddenly in the ranks, in a state of complete insensibility, with contracted pupils, and a frequent wiry pulse, soon restored by the use of cold affusion, and generally recovered without any subsequent serious febrile symptoms. One case is reported to have fallen into a state of "melancholia" soon afterwards, and ultimately committed suicide. A careful autopsy revealed congestion of the meninges, opacity of the arachnoid, and serous effusion under it, and in the ventricles of the brain. These cases all occurred in the open air, in clear weather, and nearly all, early in the day. At the outposts, along the deep valley of the Great Fish river, the thermometer often stands above 100° in a well thatched house, for weeks together, during the day, the nights being cool; but during the three hottest weeks of the season there was not a single case of sun-stroke, though the men of the European detachment were daily employed in a quarry, extracting and preparing stone for the construction of a bridge; showing that "*there*, at all events, heat alone did not seem to be a very powerful exciting cause of disease."

He next saw the disease during the hot weather campaign in Bundelcund in 1858, and instead of being the mild affair hitherto described, it was "a most formidable malady, for a time of every day occurrence, and attended with a very high degree of mortality." The regiment embarked for foreign service in the year 1851 (October), arriving at the Cape of Good Hope in the end of the same year. After being employed in operations of the most arduous character against the Kafir tribes, exposed to every variety of weather, without tents or shelter of any kind, subsisting on very indifferent food, suffering from dysentery, fever, and scurvy, they embarked for India in Nov. 1853, arriving at Madras in the beginning of 1854, when the strength was soon raised by addition of volunteers to upwards of twelve hundred men. The only serious sickness that occurred during the next four years was an epidemic of cholera, from which the left wing of the regiment suffered severely; and in December, 1858, they took the field with exactly a thousand strong, of an average height of a fraction under five feet eight inches, robust and well formed, extremely temperate, and in a perfect state of discipline. We shall not attempt to follow, even briefly, their long and weary march northward; suffice it to say that owing to their sanitary precautions, they enjoyed an almost entire immunity from sickness during the greater part of it, and it was after being in the field four months and fifteen days, and a march of nine hundred and sixty-nine miles, that the first case of sun-stroke occurred. "At this time the periodical hot winds were blowing with scarcely any intermission day and night, and the heat of the weather was almost unbearable." The men had lost their robust appearance, their health gradually deteriorated, and cases of "insolatio" occurred with increased frequency. For a long time before the occurrence of the first cases, the men suffered more or less from prickly heat, of a severity in proportion to the amount of perspiration; and the first symptom of the injurious effects of the intense heat was the disappearance of this eruption; the skin becoming rough and scaly, and free from perspiration; followed by increased heat of the surface; constipation; loss of appetite; nausea; urine copious and limpid, with frequent calls to pass it; loss of sleep; tongue rather white posteriorly; pulse frequent, sharp, and rather small; vertigo; all attended with rapid emaciation. These symptoms were looked upon rather as predisposing to the disease than premonitory of it. The men suffering from these symptoms were admitted into the hospital as cases of "Febris Cont. Com.," and were treated with perfect rest; cold sponging of the body, cold applications to the head, regulation of the bowels, and the air of the tent kept cool, and moistened by wet "tattees," &c. Great relief followed the operation of a purgative, which was generally followed by saline diaphoretics, and an occasional opiate at night, if necessary to procure sleep. The cases of "insolatio" were generally some of the stoutest and most muscular men in the regiment, many of whom had been at some former time addicted to intemperate habits. The attacks, for the most part, came on when the men were in their tents during the day, though in some instances at night. The patient had generally been lying down, and the attention of his comrades would be arrested by his hurried and heavy breathing; and on attempting to arouse him, he was found to be insensible. Others would start up suddenly, as if endeavoring to escape some imaginary object of terror; and in others an uncontrollable burst of laughter was the only forerunner of insensibility and death, which speedily followed.

In a few rare instances the symptoms came on gradually and some by an unconquerable tendency to sleep, especially after exposure to the sun. When once fully formed, the symptoms of the disease were constant and regular. The patient lay motionless upon his back, breathing rapidly, and as death approached, more and more noisily—eyes fixed, and slightly turned upwards, becoming glassy; pupils greatly contracted; conjunctiva pinky; face invariably pale; surface dry, harsh, and burning to the touch; the heart's action very rapid and sharp; later a frothy mucus, either clear, or of a brown color, was ejected from the mouth and nose. "If the disease did not yield to treatment, the heart's action soon began to fail; the pulse became fluttering; the respiration irregular; and in a period varying from a few minutes to a few hours, death closed the scene. In a large portion of cases, from the commencement of the attack till its termination in death, the patient never moved a limb, or even an eyelid." A few cases were seized from the first with convulsions, beginning in the upper extremities or muscles of the face; and gradually extending over the whole of the voluntary muscles, became of the most violent description.

The number of cases reported for 1858 was one hundred and eleven, of which forty-four proved fatal, excluding three cases returned under the head of "apoplexia;" neither does the number include those cases in which vertigo, nausea, prostration, and dribbling of urine were present, the effects of heat, yet returned under the head of "Febris Cont. Com.;" the term "Insolatio" being restricted to those cases in which insensibility or convulsions were present. In consulting a table of fatal cases we find the ages varied from sixteen to thirty-nine; the duration of the disease from five minutes to thirty-two hours. Of those who recovered, according to another table, the ages varied from twenty-four to forty-one; and the duration of the disease from three to forty-seven days. The disease was next seen at Madras, in May, 1860, when three cases occurred in the same day, one of which proved fatal. In these three cases, which are reported at length, the symptoms differed in several important respects. In the fatal case, the post-mortem five hours after death revealed the following condition: "Body rigid, and of a dark purple color posteriorly. Head—integuments exsanguine; vessels of the dura mater congested; arachnoid opaque; a small quantity of serous effusion under it; vessels on the surface of the brain everywhere intensely congested; substance of the brain natural, very little fluid in the ventricles. In each lateral ventricle there was a tumor the size of a very large green pea, and of pyriform shape, feeling gritty between the fingers, and containing several small deposits of calcareous matter, attached to the choroid plexus. Substance of cerebellum and tuber annulare congested. Thorax—cavities of right side of heart full of dark colored blood, and firm fibrous coagula. Cavities of left side empty. Valves and muscular substance of heart healthy. Both lungs, but especially the right, intensely congested, particularly posteriorly; bleeding freely when cut. Sections of a mottled reddish color. Abdomen—liver enlarged and congested, its upper surface adherent to the diaphragm; spleen rather large, congested, and friable; kidneys healthy." The question now arises: What is the true nature of this disease? Is it simply an affection of the brain from heat applied directly to the head, or apoplexy, or fever, or asphyxia? Those cases described as occurring in South Africa, the author believes to be of a purely nervous character, totally unconnected with blood disease, and uncomplicated with any serious local congestion, caused by the over stimulation of intense heat acting on the surface of the body, assisted probably by a bright glare of light on the eyes. Such cases recover with or without treatment, leaving no permanent bad effects. He believes the same condition to form the first link in the chain of diseased action in those occurring in the field, and in quarters in India; but that the more serious nature of the latter cases is due to a greater intensity of the exciting cause, with the occurrence of various complications, and other modifying circumstances. The chief complications are cerebral and pulmonary congestions, especially the latter, as revealed not only by symptoms, but also by post-mortem examination.

The predisposing causes seem to be, 1st. Plethora and unacclimatization: this was noticed throughout the campaign. 2. Debilitating causes of every kind. The men had been exposed to an extreme temperature, long and fatiguing marches, improper and insufficient food for a long time before the first case occurred; and though strictly temperate at the time, many of the first victims had been at some former time addicted to intemperate habits. 3. The peculiar febrile symptoms described as occurring in the hot season of 1858, caused by the extreme heat, producing the dry harsh state of the skin before mentioned, causing total interruption of its functions, depriving the blood of the cooling process by evaporation from the surface, and leaving the noxious matters usually thrown off by the skin, to accumulate in the circulating mass, with no vicarious action from the bowels, they being invariably constipated; an extra amount of work thus thrown upon the lungs, it is easy to understand why these organs become so often complicated with this disease, to say nothing of the imperfect depuration of the blood in the lungs, from the rarification of the air. 4. Exposure to an atmosphere highly charged with electricity. It was observed that the disease occurred with increased frequency immediately before a thunderstorm; such was the case on the only day that any cases occurred at Madras. In considering the treatment of this disease, it is well to understand the different ways in which death may take place, which are, 1st. From the affection of the nervous system alone, especially in those sudden cases occurring during active exertion in the sun, when the exciting cause acts on the surface with the greatest power, the heart's action becomes arrested, and death ensues. 2. With destruction more or less complete of the pulmonary circulation. 3. With cerebral congestion.. 4. A subsequent severe febrile attack with serous effusion within the cranium.

Treatment of the first class of cases will be of little avail, owing to the early period at which death takes place. Should time permit, we may use the cold douche, keeping the surface wet and exposed to a current of air, or fanned. Exclusion of light as far as possible, and if practicable, both external and internal stimulants. In the less rapidly fatal cases, there is no doubt that benefit is often derived from treatment, if employed with promptness. The treatment adopted in the field was as follows:—The patient, at once stripped of his outer clothing, was placed in a sitting or semi-recumbent posture, and the cold douche applied from a height of three or four feet over his head, and along his spine and chest, extremities sponged with cold water. In many cases this treatment would suffice, the first symptom of returning consciousness being relaxation of the pupils. In the more obstinate cases the hair was cut short, and a blister applied to the nape of the neck, the surface previously sponged with acetum lyttæ, sinapisms to the extremities, sides, and chest, strong purgative enema invariably, and repeated until its effect was produced. To this last, as well as the employment of blisters, the author attaches much value. A few leeches were in some instances applied to the temples, in order to relieve the congestion evidenced by the state of the eyes; but venesection was not employed in any case. If the breathing became much oppressed, and the bronchial tubes loaded with mucus, great temporary relief followed, turning the patient occasionally over on his face. During convalescence, the treatment consisted in regulating the bowels, saline diaphoretics, and small doses of quinine; and if necessary to induce sleep, an opiate at night. This treatment, however, was found not adapted to the convulsive form of the disease before alluded to. In these cases the cold douche could not be employed, from the agony it occasioned. After the failure of the ordinary remedies, the inhalation of chloroform was adopted with highly encouraging results, the convulsion ceasing after a few inspirations, and sleep immediately following. These cases, however, were few, and further observations are required. We shall not attempt to enumerate all the prophylactic directions of this graphic writer, as much has been anticipated in what has been said of the predisposing causes; and many of the means recommended are such as common sense would dictate. A good sanitary condition upon taking the field, a light uniform, with flannel worn under it, a suitable head-dress, proper time for marching, frequent halts, early attention to those who begin to falter, proper location and construction of tents, frequent bathing, and many other sanitary measures which will readily suggest themselves to the inquiring mind of the army surgeon, are strongly insisted upon. While none can doubt that those wholly unaccustomed to alcoholic stimulants are better in the field without them, our author questions the propriety of at once reducing others from their accustomed stimulus to that of tea and coffee; and when used, wine should be substituted for the stronger ones whenever practicable, and the least necessary quantity dispensed. For protection of the head he recommends a wetted towel under the cap, and around the neck and face; but makes no mention of the "havelocks" at present becoming so popular.

CASE OF INGUINAL HERNIA

IN WHICH THE CONTENTS OF THE SAC WAS THE SIGMOID FLEXURE OF THE COLON.—OPERATION—RECOVERY.

By N. C. HUSTED, M.D.,

OF NEW YORK.

Mr. Kegan, æt. 48, a laborer, ruptured himself by lifting a heavy gate, May 20, 1861, at 2 P.M. May 21, at 8 o'clock A.M., I was called, and found a large hernial tumor upon the left side. He had made several attempts to put it back himself, but could not succeed. After making an examination of the parts, I commenced the taxis and continued it for two hours without success. At 11 A.M. I returned with Dr. Krakowizer. We administered chloroform and then tried to reduce it, but failed after one hour's trial. At 2 P.M., I again made efforts at reduction, but did not succeed. At 6 P.M., Dr. John O'Riley of Fourth Street called in consultation. We resolved to try the taxis once more with the aid of a hot bath. The patient was retained in it until he became faint, and we then made another attempt, but unsuccessfully. It then became evident that there was no other method of reducing the hernia but by an operation. Dr. James O'Riley administered chloroform. I operated in the usual manner, proceeding with care until I opened the sac and divided the external ring. I then attempted to reduce the contents, but failed, until the canal was entirely slit up to the internal ring, when I succeeded in reducing the strangulated intestine.

That portion of the intestine which we found down, proved to be the sigmoid flexure of the colon. It is quite unusual to find this portion of the bowel in a hernial tumor. There was no hemorrhage. He was then placed in bed, and perfect rest and quietness enjoined. I gave him ten drops of morphine (Magendie Sol.), with directions to keep cold water constantly applied to the wound. I returned in three hours, and ordered hyd. sub. mur. gr. ij. pulv opii gr. i. every two hours until he had taken ten grs. of the submurias. It was then discontinued, and the opium, which I think is superior to any other article in combating inflammation, renewed. May 22, at 9 A.M., I found his pulse at 90, full, tongue slightly coated; at 9 P.M., pulse same, and tongue same, no pain or tenderness; ordered the opium to be continued with ice and gruel.

May 23.—Pulse 90; tongue moist, slight pain across the epigastrium, very slight pain in the region of the wound; no thirst, skin cool, urine free, sleeps well. Diet and medicine to be continued as before.

May 24.—Pulse 90; skin moist, urine free, no movement of the bowels; slight pain at times across the epigastrium; tongue cleaning at the tip; countenance good, wound looking healthy. Continue the cold water to the wound, and opium internally. At 4 P.M. I ordered ol. ricini ℥ ss. to be given him; in three hours it operated freely.

May 25, 10 A.M. Pulse 105; skin moist, cleaning; scrotum swollen and inflamed; applied cold water, and continued medicine as before.

May 26, 10 A.M.—Pulse 102; skin moist, tongue moist and cleaning; no tenderness, no pain; some effusion of pus into the scrotum, but not as much inflammation as yesterday.

May 27, 10 A.M.—Pulse 90; tongue almost clean, wound looking healthy. I removed the stitches, and bandaged him up again. Bowels moved, urine free. Continue the opium as before, with the same diet.

May 28, 10 A.M.—Pulse 84; no unfavorable symptom, the discharge from wound being free and healthy; scrotum slightly swollen. From this date he continued to improve until June 20, when the wound was healed. I then applied a truss with a spring pad, made expressly for him by Mr. Tiemann, of 83 Chambers street.

This man labored under, first, an old rupture of seven years' standing; secondly, under bad hygienic influences, such as living in a shanty surrounded by a pool of stagnant water; yet he had not an untoward symptom.

217 West 42nd street, New York.

American Medical Times.

SATURDAY, JULY 6, 1861.

THE PHYSICIAN AS A CITIZEN.

> PERMIT me to recommend to you a regard to all the interests of your country. It was in Rome, where medicine was practised only by slaves, that physicians were condemned by their profession "mutam exercere artem." But in modern times; and in free governments, they should disdain an ignoble silence upon public subjects. The American revolution has rescued physic from its former slavish rank in society. For the honor of our profession it should be recorded, that some of the most intelligent and useful characters both in the cabinet and the field, during the late war have been physicians.—DR. BENJAMIN RUSH.

UNDOUBTEDLY, medicine, whether considered as a science or an art, in its study or in its practice, is the most noble and honorable profession which man can follow. Such at least is the opinion of medical men, and there are few learned and considerate persons of any other pursuit who do not yield it equal homage. Indeed, no liberal mind, familiar with the range of natural sciences which medicine comprehends, the ennobling and liberalizing effects of its study, and above all, the humane objects which its practical application to man's physical necessities contemplates, can but regard it as a profession of the most noble and honorable character.

It would scarcely seem possible that a man could entertain so exalted an opinion of his business calling, as to consider himself exempt from the common privileges and obligations of citizenship. And this remark would have especial force, where the existing government imposed individual duties and responsibilities. The very opposite conclusion would be the more rational; the higher and more sacred the particular calling and obligations of the individual, the more grave and important his responsibilities as a citizen. The legitimate presupposition would be that such pursuit derived its sacredness from its opportunities and power of benefiting the race. For surely that business in life must be of all others the most selfish, which so exalts the individual above his fellows, that he lives entirely to himself.

There is, we believe, in our profession, a wide-spread and growing misconception of the duties of medical men as citizens; and this error of judgment is far more prevalent among that class, the members of which are regarded as representatives of the true spirit of medicine. With them, to exercise that most sacred of all the privilege of citizenship, viz. the choice of rulers by the ballot, is a condescension of dignity never to be submitted to, except, perhaps, at the solicitation of a wealthy patron who may have a personal interest in the result of the canvass. And this act, in itself the most honorable perhaps of their lives, but truly dishonorable from its motives, is performed with the shamefacedness of premeditated guilt. They scorn a knowledge of our political history, and a familiarity with current political events, as matters too vulgar to occupy the attention of minds devoted to the sacred calling of physic. Diseases and their remedies are the never varying themes of their thoughts and conversation. Health, and preventive medicine, and all measures of public interest, are discarded as without the pale of their "sacred calling." All such ignoble subjects are consigned, with a contemptuous sneer, to that class of medical men whom they term "political doctors."

Whoever has been interested in those measures which contemplated such social reforms as would improve the health and happiness of the people, but required the aid of legislation to give them form and force, and has sought the aid of medical men, has found too frequent exhibitions of this false pride of professional dignity. He has met with physicians from whom he anticipated a cordial support, who have signed petitions with a manner indicating that they tacitly protested against such desecration of their names and influence.

In the present crisis of our National Government we hear, though in subdued tones, the reproachful terms of these wiseacres of our profession; the adoption of patriotic resolutions by some of our county societies, the organization of medical bodies for the supply of hospital and other materials to the army, and the enlistment of Surgeons into the Country's service, are regarded as acts unworthy of high bred physicians. They have no sympathy or fellowship with those who entertain such *unprofessional* subjects, and engage in such menial service. Patriotism and treason are, to them, meaningless terms; for, governed by the catholic spirit of medicine, they regard only scientific attainments as the test of membership in their exalted social state.

It is not a little singular that in a free government, where the duties as well as principles of the citizen are indefinitely extended, where practically, as well as theoretically, he is the sovereign, there should be a class of persons who lightly esteem their civil obligations. And it is still more remarkable, nay marvellous, that such a class should be found in a profession which holds the most intimate relations to those influences through which the most beneficial results to society may be secured. In European countries medical men regard it as a proud distinction to be engaged in the service of the State; here it is well nigh sufficient cause for expulsion from a medical society. Abroad, the most prominent physicians labor for years to attain courtly rank, or positions in Government service, while with us an intimation of such a *penchant* is evidence that the aspirant for political favor has abandoned all claims to professional respectability, and is gravitating to the lowest level of his profession.

Against this tendency in the medical profession to exalt itself above the claims of citizenship, we earnestly protest. This feeling has already become so general, that legitimate medicine has been deprived of many salutary legislative provisions which give it popular strength and social consideration. American medicine will have but half fulfilled its mission when it attains the rank it seeks, as a science. Upon it are also laid the burden and responsibility of important social reforms, which it alone can accomplish. Preventive medicine, or the practical application of the principles of sanitary science to the art of living, is yet to engage the earnest attention of medical men in this country. But whoever enlists in this great work must for the time incur the odium that many foolishly and most unjustly attach to those public movements of medical men necessary to the establishment of proper organizations. But let them not be disheartened. Preventive medicine will yet be recognised, we believe, as the noblest branch of the science, and those who succeed in systematizing its operations among our people, will be regarded as the most worthy of the profession, as well as public benefactors.

We commend to the younger members of the profession the counsels of the patriot, sage, and physician—the father of American Medicine. An active participant in most of the political measures of the Revolution, with such colleagues as Morgan, Warren, Shippen, Jones, and Bartlett, he was naturally led to believe that this great event would form an era in the social and political history of his profession. And contemplating the influences and privileges which citizenship under a free government conferred, he foresaw that medical men, by their intimate social relations, might and should be an important element of political power. Hence his eloquent appeal in behalf of that interest in public affairs which alone can render the physician a useful citizen.

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THE WEEK.

The fatal termination of the disease with which Count Cavour was seized, is attributed to repeated blood-lettings. The patient had symptoms of fever, for which he was promptly bled. The symptoms became more severe, and he was again depleted. This operation was several times repeated, until alas! too late, it became evident that the fever was typhoid! The contra-stimulant plan seems to be as popular in Italy to-day as at any former period.

A recent trial for malpractice occurred at Elmira, N. Y. The case was one of anchylosis, following the extraction of a loose cartilage from the knee-joint. In collecting testimony, Dr. Squires, the defendant, appealed to Hippolyte Larrey, the French surgeon, who had written a thesis upon this subject. We are not aware what facts were presented on the trial, but Larrey has lately communicated to the Society of Surgery, of Paris, the following statistical results of his researches:—Total cases of extraction, 168; direct incision, 129; indirect or subcutaneous, 38. The former gave 98 cures, 5 failures, 28 deaths; the latter 19 cures, 15 failures, 5 deaths. On trial the jury did not agree.

Surgeon General Vanderpoel, of this State, is fully alive to the welfare of the New York troops, as is seen by the special order directing Inspector Mott to proceed to Washington, and inquire into their sanitary condition. This is a movement in the right direction. The thorough inquiry which Dr. Mott will institute, must result in the removal of many causes of discomfort and disease.

The laconic reply of Judge More to the following inquiry is worth the attention of physicians:—

New York, April 2, 1861.

To E. More, Esq.—Sir—Will you please inform me whether a subpœna served on a physician to appear and testify in any case, does or can, under *any circumstances whatever*, impose an obligation upon the person subpœnaed to visit a sick person under the care of another physician without the assent of the said attending physician.

Truly yours, * * *

Reply:

It does not and cannot impose any legal obligation to do so. Nor does it confer any right to do so.

Yours, O. More.

April 5, 1861.

Among the Surgeons who have passed through this city with their regiments to the seat of war, during the present week, we notice the name of Dr. Luther V. Bell, Surgeon to the Eleventh Mass. Regiment. Dr. Bell was formerly at the head of the McLean Asylum, Mass., and ranked among the first American students of mental diseases. We gladly record the accession of men of such distinction to the medical staff of the army.

Of the Surgeons at Fortress Monroe, Va., Bellevue Hospital, New York, furnishes six. Dr. Heber Smith, Surgeon of the Monticello, who was recently severely wounded in the face, was also from Bellevue.

We notice in recent London journals the death of Mr. Henry Gray, the author of the popular work on Anatomy now in such general use in this country. His age was thirty-six. He was Lecturer on Anatomy at St. George's Hospital, and the author of several learned treatises. His disease was confluent small-pox.

It is stated that Rokitansky, the German pathologist, is a representative in the Upper House in Austria—its House of Lords. He is called to that position that his scientific knowledge may be of service to the country.

Prof. Hamilton was presented with an elegant sword by the ladies, when about leaving with his regiment for Washington. Several of his pupils also presented him a revolver.

Dr. Henry A. Martin, of Roxbury, Mass., has been ordered to Fortress Monroe to vaccinate the troops.

In the organization of the Sanitary Commission at Washington, Dr. Elisha Harris, one of the Editors of this Journal, who had been appointed to a membership by the authorities, was elected Corresponding Secretary. The duties of this office have required his presence at the seat of Government for several weeks past, and have absorbed his entire time and attention. As it is probable that these duties will daily increase during the continuance of the war, requiring his presence at Washington or the seat of war, Dr. Harris has temporarily withdrawn from his editorial connexion with the Medical Times, and will devote himself exclusively to the details of the operations of the Commission.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 8, 1861.

Dr. A. C. Post, President, in the Chair.

NECROSIS OF TIBIA.

Dr. Finnell exhibited a necrosed portion of the tibia, removed from a boy ten years of age, who about a year before was attacked with periosteal inflammation of the left tibia, which resulted in suppuration, and the formation of several openings upon the anterior surface of the leg. When Dr. F. saw the case three weeks ago, there was but one opening that remained, through which the presence of dead bone could be detected. The whole bone was about one-third larger than its fellow of the opposite side. In the immediate neighborhood of the dead bone, the tibia was markedly eburnaceous, requiring the use of a great deal of force to get through it, two instruments having been broken in the attempt. All the dead bone was removed, and the patient is doing well.

Perforating Ulcer of Stomach, terminating in External Abscess.

Dr. Clark narrated the history of the following case:—A woman, forty five years of age, was admitted into Bellevue Hospital about three weeks before her death, with the statement merely that she had been an habitual tippler, and that about a week previous she had been seized with severe pains in the epigastric region, extending backwards posteriorly to the spine. When the pain began, she had some vomiting; but none before. I will anticipate sufficiently to say, that there was found an ulcer of the stomach on the surface looking towards the liver, large enough to admit my thumb, that had been closed by adhesions, such as I will describe directly. In that connexion, I will recall the remark relating to the vomiting. The pain she had suffered in the epigastrium, shifted its position in about four or five days to become somewhat lateral, and at the time of her admission it was quite over on the left side, just along the border of the ribs. On examining the abdomen, about two inches below the border of the ribs, there was a certain degree of hardness, and a great deal of tenderness. I recognised, as I thought, the formation of matter, or rather that kind of inflammation likely to terminate in the production of pus. At the end of three or four days from that time, she began to suffer from occasional and irregular chills, and would sweat. She was treated by leeches and fomentations repeatedly applied to the side, and when they failed in affording relief, anodynes were administered. No other medication was employed, except such as was calculated to combat the influences of purulent accumulation. In something less than three weeks, the House Physician pointed out to me a large swollen mass in the form of a band, running pretty nearly in the direction of the eighth and ninth ribs. I directed that it should be poulticed, recognising it as a perforation of the abscess from within. Though no pus could be felt, it was quite evident that it was a diffused abscess similar to that often seen in the chest. The second day of the poulticing, I thought I could get some obscure fluctuation, but was not quite ready to open it with a lancet or other instrument, and thought I would wait a day or two more. Before the second day was completed, the patient died suddenly of suffocation. The House Physician being called suddenly to the case, and having no time to seek assistance, thought himself authorized in performing tracheotomy, with the view of relieving symptoms which he thought depended upon obstruction somewhere in the larynx. The patient, however, did not breathe after the trachea was perforated, and no artificial means that could be adopted could renew the vitality.

On post-mortem examination, the first opening being made into the external tumor, a certain amount of fœtid gas escaped, and the tissues in the neighborhood were seen to be considerably infiltrated with pus, though the fluid was not sufficient in quantity to allow it to flow in a stream. The incision opened into an abscess notwithstanding, which, as will be seen, occupied an extraordinary position. The stomach was found attached to the liver, by a space about as large as the palm of my hand. The abscess was traced to the very opening of the stomach, but not into it. This abscess was narrow in its relation to the stomach, but grew wider as it went outwards, being limited below by adhesions to the intestines and the abdominal wall; it ran outwards to the diaphragm, and perforating it left a considerable quantity of pus in the abdominal cavity, and also a considerable quantity in the pleuritic cavity, which in its turn was shut up by adhesions in such a way as to make a sac below sufficient to hold about half a pint. That had in its turn perforated the intercostal space below the ninth rib, producing the external swelling alluded to. The intestine was nowhere perforated that we could discover. The order of events in this case appeared to me to be this:—First, we had the ordinary chronic perforating ulcer of the stomach of rather unusual size; nature for protection had produced adhesions to the liver, and from some cause or another these adhesions had yielded to such an extent as to permit a portion of the stomach contents into the abdominal cavity, where it excited inflammatory action, and an abscess formed giving rise to the pain directly from the epigastrium. The collection of pus being shut in by adhesions below, pushed its way outwards, causing the pain to shift to the side, and in its effort to escape from the abdominal cavity, penetrated first the diaphragm, sealed itself by adhesions to the lung and to the pleuritic cavity, and finally perforated the intercostal space named, and we were ready to meet it as soon as we could ascertain positively the existence of fluctuation. Our plan, however, was cut short by the sudden death of the patient. It was found that the larynx was quite obstructed by œdematous effusion, the epiglottis was pushed backwards by accumulations of serum on its anterior face between it and the tongue. The mucous folds covering the upper and posterior folds of the larynx were infiltrated, and overhung the chink of the glottis. I have recited the case on account of the singular manner in which the abscess appeared to have been produced.

Dr. Post referred to a case which he had seen a number of years ago, of an abscess originating in the liver extending into the cavity of the thorax, causing purulent expectoration, and at a latter period purulent evacuation from the bowels. Although no post-mortem examination could be obtained, it was evident from the symptoms which were successively presented in the case, that first the pleural cavity was perforated through the diaphragm, while another portion perforated the intestine.

Closure of the Iliac Arteries by Coagula.

Dr. Clark exhibited a second specimen, consisting of the lower portion of the abdominal aorta and the two primitive iliac arteries, as far as the femoral. There will be seen, said he, a plug or coagulum that completely fills the lower extremity of the abdominal aorta, following the course of the divisions of the artery into the femoral, and following the internal iliac until it gives off a branch which doubtless returned the blood from another source and allowed circulation below. The history of the case is this:—A woman somewhat past the middle age had had for a long time an abdominal tumor that was regarded as ovarian. The tumor was of a size to weigh nineteen pounds after its removal, and the accumulation of fluid in the abdomen, consequent upon its presence, was equal at least in bulk to the tumor itself, and probably considerably exceeded it. When the sufferings were sufficient from abdominal irritation to require it, she was tapped. After an interval of about four weeks she was tapped again, and again a third time, after which she came under my care. Gradually the fluid again accumulated, and rendered tapping again necessary to save life. After this tapping, two pailfuls of fluid being withdrawn, an unexpected occurrence presented itself; it was the complete cessation of the pulse in the left femoral artery, and throughout the arteries of the left leg, accompanied with a sense of coldness in the limb, twitchings, cramps, and a considerable amount of muscular feebleness. The cause of the suspension of the circulation was conjectured to be the falling back of the tumor after the last tapping, in such a way as to press upon the iliac artery, and obstruct it as a trunk. She was placed in a position to relieve that pressure, but with no good effect. We asked some of the surgeons to look at the case, but no plans were suggested that seemed to be feasible, and we were obliged to do the best we could by position, cherishing the warmth of the limb by warm applications and cotton. Still she seemed to suffer greatly from a sense of cramps, there being no decided muscular spasm. The limb in about four days began to be ecchymotic, purpuric spots extending from below upwards, so as to occupy, after about six or seven days, nearly the whole of the leg. Below the knee there was a slight œdematous swelling; sensation remaining, but muscular power almost entirely destroyed. Two days before her death pulsation ceased in the right iliac artery, and the explanation will be seen in the specimen that the plug extended upwards so as to fill the lower part of the abdominal aorta. She did not, however, at any time complain of so much uncomfortable sensations in the right as in the left limb. The internal iliac on the right side is permeable, while both the external and internal iliac are closed on the side first affected. She died on the ninth day after the last tapping. There was no actual slough in the limb first affected, but after death the cuticle came off readily. She seemed not to die from gangrene, but from some unexplained relation of this suspension of the circulation to the centres of life. The case, at all events, was a new one to me. The ovarian tumor was composed of a multilocular cyst—a few of the cysts were of the size to contain a quart, while a great many were not larger than a walnut. Their contents were viscid and mostly of a dark brown color.

Bronze Skin from Fatty Liver.

Dr. Clark presented a third specimen, which consisted of a supra-renal capsule, removed from a person who before her death was as markedly bronzed as any person he had seen, a bronzing so much like Addison's disease that he at least had no means of distinguishing between the two. The following history of the case was furnished by the House Physician.

Rose Hughes, married, aged 40, a native of Ireland, was admitted to Bellevue Hospital, April 9th, 1861. She stated that she had been sick for some four or five months, having been first taken with a chill, and then wandering pains throughout the body. She was able to be up and about, however, until about a month previous, when being unable to pay her rent, the landlord turned her out of her room, and she slept for three weeks on the landing at the head of the stairs, by which she took cold, as her feet swelled considerably. She had some cough now, but had some months previously spit blood for about a week. This was all that could be gained from her, and it should be stated that she was so weak, and seemed so to wander, that implicit reliance cannot be placed upon her statements.

On examination her skin was seen to be bronzed, and she stated that it had not always been so, but could not tell when she first noticed it. Well marked signs of phthisis were discovered in both lungs, and there was suspicion of pneumonia in the left lung. She was ordered beef tea and some stimulus. She continued for two days without change, but on the third, five or ten minutes after we had made our morning visit to the ward, but had noticed no change, we were summoned to her, and told she was dying. On reaching the ward, we found that she had been assisted to the water closet, but on reaching it, had fallen prostrate, and had to be carried back to the bed. We found her rather wild, trying to sit up in bed, refusing to take anything, and calling for the priest. We attempted to give her some stimulus, but she would take nothing, calling for the priest, and as he arrived at once, we requested him to make her take something, which he did, but to no purpose, as she died in about fifteen minutes.

Post Mortem, fifteen hours after death.—Body much emaciated. Head not examined. The bronze color extended to the knees, with the exception of a small spot on each side. From the knees to the ankles it was absent, but appeared again on the feet. The lungs were firmly bound down by old adhesions: in the apex of the left was a large tuberculous cavity, and the lung was infiltrated with tubercles: there was also some pneumonia in the lower lobe. The right lung also contained tubercles. The liver was large and fatty, weighing seven pounds. The kidneys were natural in appearance, and there was no disease of the suprarenal capsules.

I had no hesitation in saying that this was a case of tuberculous disease of the supra-renal capsules, and I was very much surprised when it was found that there was none. Then came the question, what produced this peculiar color? On examining the liver it was found to be the seat of fatty degeneration, and the enlargement of such a character as to give place to the kidneys of both sides, by forming deep sulci. The upshot of the case is, that it must be considered an instance of ephilis hepatica, consequent probably upon this disease of the liver.

Intus-susception of Intestine.

Dr. Jacobi presented a specimen of intus-susception of the intestine, which had been sent to him, with the following history. The attending physician was called to see the child on the second day of its sickness, and found it suffering from some pain in the abdomen, with moderate fever, intense tenesmus, and numerous mucous stools, mixed with blood. The diagnosis of dysentery was made, and the usual treatment for that disease was resorted to. The case was visited twenty-four hours subsequently, but the symptoms were unabated, no fœcal matter appeared in the stools, although less blood made its appearance. On careful physical examination, a small tumor was detected, per rectum, at a distance of two or three inches from the anus. The correct diagnosis was then made, and purgatives were no longer resorted to. An attempt was then made to reduce the vaginated portion by means of inflation, but failed. The prominent symptoms, until death ensued, were about the same as has been stated, with the exception of the vomiting. The invaginated portion of the gut was exhibited, situated about two inches below the lower end of the rectum. The upper portion of the rectum was very hyperæmic.

Dr. Post asked if the physician had considered the expediency of opening the abdomen during life, with a view of reducing the invagination.

Dr. Jacobi did not know of any favorable result following such an operation.

Dr. Post remarked that the operation was considered justifiable when a correct diagnosis had been made.

Dr. Clark asked what were the symptoms that the physician relied upon in making the diagnosis.

Dr. Jacobi had no doubt but that the case had been one of invagination from the first, and that the physician was induced to arrive at the diagnosis from the symptoms of tenesmus, the number of passages mixed with blood, slight pain all over the abdomen, and the non-appearance of any fœcal matter in the stools twenty-four hours after the administration of a large purgative.

Dr. Clark remarked that a localized mucous inflammation had been considered by Dr. Swett and himself as a very frequent cause of invagination. The rule as regards the cause, which was more frequently applicable than any other in those cases of invagination unconnected with cerebral disease, was this: a portion of the mucous membrane becomes inflamed, the calibre of the tube becomes enlarged and loses its contractile power in consequence of the paralysis of the muscular coat, and the portion of intestine above being in a healthy state, drops into the open intestine below. The thought occurred to Dr. Clark, while the case was being recited by Dr. Jacobi, that the occurrence of the invagination might have been caused by the dysentery affecting the rectum in a manner similar to the inflammation of the smaller intestine alluded to.

Dr. Jacobi was convinced that the explanation of the occurrence of the disease was, in a large majority of cases, perfectly true. In this connexion he remarked that vomiting in this disease appeared later and disappeared sooner in children than in adults; and referred to one case of a child seven months old, with invagination of the colon, in which the vomiting ceased full two days before death.

Dr. Post did not see how Dr. Jacobi's case, in the absence of vomiting, could have been diagnosticated from dysentery.

Dr. Voss asked if polypus of the intestine might not have been a cause of invagination. He had met with two cases in which he was disposed to give this as an explanation of the origin of the trouble.

Dr. Jacobi remarked that he had never seen a case of that description.

Exsection of Femur.

Dr. Jacobi exhibited a number of small fragments, the remains of the acetabulum and head of the femur of a boy, four years of age, upon whom he had performed the operation of exsection. The child was brought to Dr. Jacobi's clinic, and the history of the case, as given by the father, was,—that the child, about two years before, had fallen from a chair or table, and from that time the usual symptoms of hip disease had shown themselves, and increased to the last stage of morbus coxarius. About two or three days before the patient first presented, a swelling commenced in the region of the hip-joint, and was found to contain pus. This swelling, in the course of the few following days, began to increase and extend itself over the front and lower part of the abdomen of that side, giving rise to considerable constitutional disturbance. An opening was then made into the abscess, when a large quantity of pus and neurotic tissue was discharged. There were left two fistulous openings, one along the crest of the ileum, the other above the symphysis pubis. Finding that the health of the child was rapidly run down, exsection was proposed and performed. What remained of the head of the bone, together with a portion of the neck, was removed, and also the fibro-cartilaginous ring of the acetabulum and the inner portion of the acetabulum itself, to such an extent as to expose the fascia pelvis to the extent of one-quarter of a square inch. It was eighteen days since the operation, and the child was doing remarkably well, and promised speedily to recover.

Cyanosis in a Child.

Dr. J. Lewis Smith presented a heart taken from a child five years old, who had been cyanotic from birth. About two weeks before, the child was attacked with pleuro-pneumonia, which resulted fatally. During the continuance of this acute disease, the blue color of the skin became more marked than before. At the autopsy, the mucous membrane of the trachea and bronchial tubes was found injected and thickened. Both lungs were readily inflated, with the exception of a small portion of the inferior lobe on each side. The point of chief interest in connexion with this case, was the condition of the heart. The septum between the auricles was absent, as was also the case with the septum of the ventricles, with the exception that a narrow band extended across. The patient, during life, virtually had no more than two cavities to the heart.

Dr. Clark remarked: I don't think it is necessary to infer that the blood, in these cases, flows as a mixture. I have several specimens analogous to the one shown. I have also some in which there is an opening in the auricular septum, some in which there is a very large opening in the auricular septum, and also a corresponding one in the ventricular septum, and yet in some of the cases the persons have lived to a considerable age, and have not been invalids. The most remarkable of these cases was that of a German woman, who had earned a comfortable living for herself, and after her marriage for her daughters, by making paper-match boxes. Up to forty years old, her own statement was corroborated by that of her daughters, that she had never suffered from blueness of the face. At forty she was attacked with pneumonia, when she became subject to cyanosis and to frequent attacks of very difficult breathing. In that condition she first came under my observation. In the course of two years after, she died in one of these attacks of dyspnœa and blueness. On post-mortem examination it was found that there was an opening in the auricular septum fourteen lines in diameter that was congenital. The opening appeared as a circular defect in the walls of the septum, and as the edges were smooth and rough there was no chance for inferring any recent lesion. The explanation that I gave myself for the considerable degree of health which she enjoyed was this:—that as the two horns beat simultaneously, auricles and ventricles, each couple at the same time, both columns were made to maintain their natural course, each serving as a wall for the other. When, however, she got pneumonia, the right side of the heart became more or less obstructed by the difficulty of sending blood through the lungs. Now the venous blood would naturally enough be forced over on the other side. This unequal action being established in the three or four weeks during which she suffered from pneumonia, the proper balance of the two columns was never afterwards gained. It seems possible that a similar condition might exist in such a heart as this. This was the case also in one of the specimens that I referred to just now, where a double opening existed, and yet the child lived five years.

Dr. Krackowizer thought that cyanosis was not so much due to mixture of the blood as it was to stagnation of the venous blood in the capillaries from some contraction either in the cavities of the heart or in the arteries by which the blood finds difficulty in being propelled into the lungs. In the specimen presented he noticed that the pulmonary artery is almost a fragmentary branch.

Dr. Jacobi thought that cyanosis was due, in the majority of cases, to congenital incompetency of one of the valves.

Dr. Clark stated that he had several specimens in which cyanosis was a symptom, where nothing abnormal existed, save a deficiency in one or other septum. In such children the blue tint may not be noticed, unless the child cries, and thus distributes the circulation through the lungs.

Dr. Krackowizer remembered a case which Dr. Schilling presented to the society a few years ago of malformation of the heart, where the aorta originated from two roots, each root taking its origin in a separate ventricle, and the pulmonary artery being a branch of this aorta. Besides this, there was some malformation of other branches of the arch of the aorta. During the life of this child, far from there being cyanotic symptoms, the patient was noted for its marble-like skin.

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Singular Phenomenon.—In boring for coal midway between Wakefield and Pontefract, at a depth of one hundred and forty yards, a strong smell of sulphur was perceived, impregnating the water that bubbled up in the boring hole. The water soon reached the surface, and has been boiling, or rather (for it is only warm) bubbling furiously; and on applying a lighted paper the sulphur blazes up through the water to the height of three or four feet, presenting the appearance of "snap-dragon" on a large scale, the boring hole being about five feet square. It is estimated that a depth of one hundred yards will still have to be bored before the coal is reached, but how long it may be before operations can be resumed remains to be seen. Hundreds of people have visited and are continually visiting the spot, the phenomenon, unprecedented as it would seem, being an object of general interest in the neighborhood.—*British Med. Jour.*

Correspondence.

FOREIGN CORRESPONDENCE.

[Letter from David P. Smith, M.D.]

LONDON.

February 15, 1861.

Mr. Skey lectured to-day upon sudden retention of urine occurring in a young child, and also upon the diagnosis and treatment of enlarged prostate. Supposing a healthy child to be suddenly unable to void its urine, he said it could arise from only one thing, impaction of a small stone in the urethra. I suppose he considered the sudden retention you sometimes have from the irritation of worms in the rectum, and also, as in one instance occurring in my own practice, the obstinate retention from fright, as examples of retention occurring in unhealthy children. The case I allude to as occurring from fright was that of a little girl five years of age, who, on being told that rats would bite her if she went to the privy, stayed away for a long time, and for about a fortnight would retain her urine for eighteen or twenty hours, although suffering the greatest agony, in spite of all persuasions to the contrary. Finally, giving her opium and taking her out to ride, and in other ways distracting attention, sufficed to dispel the horrid images her mind had invoked, and when that was done recovery was immediate. Might not some fright stop incontinence as well? Mr. Skey, passing over these nervous cases, said, that an impacted calculus must be the cause of sudden retention in a child, and recommended, after feeling it from the perineum, to cut down and remove it. He said that although attempts might be made to remove it per urethram he had almost never known such attempts succeed. In the course of a long experience and with every imaginable instrument, he had found the extraction of fragments remaining after lithotripsy very rarely succeed. It was spoken of as practicable, but he had very rarely, indeed, accomplished it.

Feb. 16.—A Surgeon could hardly visit London without going to see one so famous as Mr. Fergusson. To-day I saw him perform an operation for ruptured perineum, and one also for cleft palate. He pared the edges of the ruptured perineum very deeply indeed, so much so that three ligatures were applied to as many arteries. Three silver sutures were made to include much tissue by very large, seemingly clumsy needles, set in large rough handles, which gave perfect command over the points. Then the patient with cleft palate was brought in, and the operation initiated by the cuts made for the division of the palatal muscles. Then, of course, the edges of the cleft were pared, and silver sutures applied by means of the prior introduction of silk ligatures. The ordinary nævus needles were used. Copious hæmorrhage occurred during this operation, and certainly very serious wounds were made in the palatal tissues.

Having performed this operation in a good many cases, and having succeeded under very unpromising circumstances without division of the muscles, I may perhaps be allowed to question the propriety of Mr. Fergusson's procedure. May not his success depend upon his great care in the adaptation of the edges, and his adroitness in the introduction of the sutures, rather than upon the supposed muscular divisions? From my experience in ten operations I am led to choose integrity of tissue, even plus contractility, rather than tissue wounded and irritated, though it may be perfectly passive.

PARIS.

Monday, March 4.—This morning at eight o'clock I took the omnibus out to Laraboisierie, the hospital rendered famous by Chassaignac. About forty students followed him around the wards. I saw a great variety of abscesses in every possible situation, all with from one to four of his drainage tubes traversing them. I saw one running through a scrofulous wrist joint, and one between the second and third metacarpal bones, to drain a palmar abscess. A solution of nitrate of silver was applied to every sore with great impartiality. After the visit to the wards we repaired to the operating theatre, and witnessed the following operations:—1. Puncture of a simple abscess in the neck, and introduction of a drainage tube. 2. Removal of a large hemorrhoid by the écraseur. The chain was tightened at intervals of from fifteen to thirty seconds. 3. Removal of a tonsil by the quillotine. 4. Incision required in fistula in ano made by écraseur. Here the chain was tightened every ten seconds. 5. Puncture of a hydrocele by a trocar, which made a double puncture, so as to allow of a drainage tube being introduced through which the serum was evacuated. The drainage tube was then withdrawn, having been dragged into the operation for no useful purpose; somewhat like the large hole through the door for the cat, and a small one for the kitten.

Chassaignac makes use of trocars about a foot and a half long; why I know not, unless he has it in contemplation to put a drainage tube through some of the vital organs. He operates in all cases of cancer, and of course claims cures. A case was shown to-day of cancer involving all the tissues at the base of the tongue, upon which he proposes to operate. A boy was shown us in very good health, upon whom four months previously amputation at the hip-joint was performed for cancerous disease.

At half past twelve o'clock I went to Dr. Sichel's clinique, where I saw a great number of cases of diseases of the eye. It is a most excellent place for study, for certainly almost, if not quite, every form of eye disease was shown. Every facility is afforded to students, on the payment of a small fee, for the examination of these cases.

March 9.—To-day I visited the wards of the famous Civiale at the Neckar. He shows his age, but is yet very active. It was certainly very instructive to see the great tenderness and dexterity with which he passed bougies through close strictures. In several cases of tight stricture he used an instrument for internal incision, so fashioned as to cut from behind forward after having been passed beyond the strait place. He remarked that the process was devoid of danger, and much shortened the duration of treatment. After incision a gum-elastic catheter is introduced, and retained twenty-four hours, and after that a metallic bougie is passed every morning. He remarked upon the great frequency of hypospadias to a slight degree.

I also went into a part of the Neckar devoted to children, and to my mind they afford one of the most interesting fields of observation in Paris. Scrofulous disease of the joints seemed very frequent among them.

A few days since I visited La Pitié to see Maisonneuve, who ranks very high here as a bold and dexterous surgeon. Report has it that he thinks it is time enough to look for an artery when he has cut it, and that charpie plugs up many a wounded vessel in his wards. In following him about, I was particularly struck with his plaster of Paris splints. They are made by saturating a piece of cloth, or lint, with quite a thick solution of the plaster in water, and then doubling the cloth upon itself as many times as is requisite to obtain the required strength, and applying it closely to the limb with a roller bandage. M. Maisonneuve said that it *set* before he reached the end of the ward, thus forming almost instantaneously a firm stiff shell for the limb, perfectly adapted to all the inequalities of surface. I took pains to see many of these splints removed, and noticed particularly that there was not a sign of unequal pressure to be seen around the joints or elsewhere. Two or three of these splints were freshly applied by M. Maisonneuve, with certainly much more facility than pertains to the starch bandage. A man was dying in one of the beds who had suffered amputation for gangrene of the lower limb. M. Maisonneuve regretted that he had not made the flaps by the temporary ligature instead of by the knife, saying he had found that method less fatal. Adjourning to the dead house M. Maisonneuve demonstrated to us upon the cadaver the merits of his instrument for internal division of stricture of the urethra, showing that it cut the strictured part and nothing more, while all the other instruments invented for this purpose are in truth scarificators. First, a gum-elastic bougie is insinuated through the stricture, then a slender grooved staff is screwed on to the end of it and pushed along through the stricture, the bougie, in the meantime, coiling up in the bladder. Now, the staff traversing the stricture, a delicate, long-handled, chisel-shaped, probe-pointed knife is slid down the groove, the probe point preventing the division of any tissue until its chisel point comes against the stricture, which is immediateately cut through. The moment the whole straitness is divided the knife ceases to cut, and may be run on into the bladder without harm.

Army Medical Intelligence.

APPOINTMENTS.

Surgeon-General of Massachusetts.—The Governor has commissioned **Dr. Wm. J. Dale**, of Boston, as Surgeon-General of the Massachusetts forces.

Medical Officers for the Massachusetts Regiments.—First Regiment: R. H. Salter, Surgeon; S. A Green, Assistant Surgeon. Second Regiment: L. M. Sargent, Surgeon; L. R. Stone, Assistant Surgeon. Third Regiment: C. A. Chamberlain, of Northampton, Surgeon. Fourth Regiment: S. A. Holman, of Taunton, Surgeon; Z. B. Adams, of Boston, Assistant Surgeon. Fifth Regiment: Peter Pineo, of Boston, Surgeon; P. A. O'Connell, Assistant Surgeon. Sixth Regiment: Luther V. Bell, Surgeon; F. Foye, Assistant Surgeon.

Appointments to the Volunteer Corps of Pennsylvania.—**Surgeons:** Alfred W. Green, Germantown; L. W. Reed, Norristown; Charles Bower, Newton Hamilton, Mifflin County; George T. Carpenter, Pottsville; B. A. Lichtenthaler, Lock Haven; Thomas B. Reed, Washington.

Assistant Surgeons: G. L. Pancoast, Philadelphia; W. F. Marsh, Honesdale; Edward Brenneman, Lancaster; J. M. Lodge, Philadelphia; H. K. Neff, Huntingdon; Thomas Jones, Philadelphia.

First Regiment Wisconsin Volunteers, Surgeon B. F. White, Assistant Surgeons L. J. Dixon, J. Crugom.

New York Regiments, Thirty-First Regiment, Surgeon F. H. Hamilton, Assistant, Lucien D. Manville; Volunteer Assistants, E. A. Brown, F. H. Hamilton, H. G. Bates, G. H. Marvin. Twenty-Second Regiment, Surgeon J. B. Atherley, Assistant Surgeon, W. F. Hutchison. Fifteenth Regiment, Sugeon James McNair. Thirtieth Regiment, Surgeon F. L. R. Chapin of Albany, Assistant Surgeon J. A. Skilton, of Troy. Thirty-Second Regiment, Surgeon William B. Little, Assistant Surgeon G. T. Totten. Mozart Regiment, Surgeon, J. H. Thompson, Assistant Surgeon Dexter. Twentieth Regiment, Julius Hansen, Assistant Surgeon Charles Holland.

California Regiment, Surgeon A. C. Baker, Assistant Surgeon Justin Dwinelle.

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A MONTH IN A VOLUNTEER CAMP.

Surgeon A. B. Crosby, *First Regiment New Hampshire Volunteers*, writes to the *Boston Med. and Surg. Journal*:—

"I had the honor of being appointed Surgeon of the First Regiment N. H. V. on the first of May of the present year, and at once entered upon the discharge of my duties at Concord, N. H., where the regiment was encamped. Under the general direction of Major Seth Eastman, U. S. A., the mustering officer, I inspected every man in the regiment. The inspection was of course not as rigid as for the regular army. It was only necessary that the recruit should be able to hear and see well, give evidence of sound lungs, show sound hands, and a free use of all his limbs. Hernia was regarded as an insurmountable objection. Between forty and fifty men were rejected under this inspection. As soon as the ceremony of mustering the men into the U. S. service was complete, the whole regiment, in accordance with the army regulations, were vaccinated, although much against the wishes of some of the men. As soon as practicable, I organized a hospital force, consisting of a surgeon's mate, Dr. H. C. Shaw; a hospital steward, Dr. B. F. Eaton; four nurses, two matrons, and a cook. A wooden building was hastily thrown together, sufficiently large to accommodate twenty beds. Near the ridge pole, at each end, a small swing window was provided, and a suitable stove at the centre of the building, thus securing a very perfect ventilation. On the eighth of May I commenced keeping a hospital register, according to the medical regulations of the U. S. A. From the date above-mentioned to the eighth of June—one month—I had received and treated a hundred and twenty-five cases of acute disease. The number of out-patients was also very large during the month. Some mornings, as many as fifty out-patients were prescribed for, and the average of this class of patients was as high as fifteen per day. * * * * *

"The First Regiment N. H. V. has undoubtedly suffered more from disease, with one or two exceptions, than any regiment in the field. The encampment at Concord, situated on a dusty sand plain, was particularly unfavorable for the men. They were lodged in wooden barracks, with poor roofs, the weather was raw and much of the time wet, and the hospital was constantly full. The State equipped the regiment with great generosity. Through the kind coöperation of Governor Goodwin and General Joseph C. Abbott, I was enabled to provide the medical department in a most satisfactory manner. Our medicine chest, hospital stores, &c., were abundant for the campaign, and we were prepared to open a hospital with twenty beds, wherever we might be landed. We were also provided with two ambulances, one for two and one for four horses, the latter so arranged as to carry twenty men at full length, or thirty when sitting erect. On the twenty-fifth of May we left Concord, being obliged to leave twenty men behind us, some of them convalescing from pneumonia, &c., and a few with measles. * * *

"On Tuesday we marched through Washington and out about two miles from the city, into the park of a gentleman by the name of Fletcher. It is a most beautiful bit of turf, surrounded by fine oak trees, called Kalorama; a Greek word, as I judge, meaning 'beautiful view.' My hospital tent, large enough to accommodate twenty patients, was soon pitched, and ten men put to bed. The measles now came thick and heavy; yet, notwithstanding that we had one storm of five days, our cases all did much better than I have usually observed, in my own practice, in private families. I attribute the favorable results in our cases of acute disease to certain hygienic measures which have been scrupulously carried out in all cases. First, every patient has had his whole body sponged over with hot soap-suds once every day; and if suffering from much febrile excitement, twice. Second, all our patients have had the most simple nourishment, properly cooked, and in quantities carefully graduated to their wants. Third, there has been an abundance of fresh air always about the patients, and the beds changed as often as every other day. I had a trench dug around the edges of the hospital tent, six inches deep. At the most depending corner a gutter is dug off for some distance, so that in case of rain the drainage is perfect and the ground under the canvas remains perfectly dry. The ground is then covered with a layer of dry straw, and our single-bed sacks, filled every time they are used with fresh straw, rest upon this layer. My hospital force is divided, so that one half is on duty twelve hours during the day, and the other half during the night. The patients are thus sure of good nursing both day and night. In case the air is very damp, a little alcohol poured into a shallow pan, and burned in the centre of the tent, dries the air perfectly, and need not be repeated more than once in two hours. * * * *

"On referring to the list of diseases enumerated, it will be seen that fifty-eight, or nearly one half the cases, were measles, which may be regarded as accidental; yet there remain sixty-seven cases of miscellaneous affections—a large number for a regiment of healthy countrymen, only a month in camp. Much, I believe, if not the greater part of this disease has originated from the carelessness of the men themselves, who, in spite of all remonstrances, throw themselves on the damp ground, exercise no care in their diet, however much cautioned, and then wonder that they are sick. Our men were enlisted from farms and machine-shops mainly, and undoubtedly possess a great deal of strength. They are full of pluck, and, as the saying is, 'just spoiling for a fight;' yet I do not think that it will follow that they will endure the most. At the end of a march of fifteen miles, from Washington to this place, the thermometer being at 90°, twelve men were obliged to go into hospital at once. On the contrary, the New York Ninth, made up of clerks in the city, marched side by side with us the same day, and at the end of the march had only one man to go into hospital, and he sick when they started. I attribute this to the fact that these young New Yorkers are much more in the habit of being on their feet, and walking over the 'magnificent distances' of New York. Instead of this, our New Hampshire farmers hardly ever walk any distance, usually having a comfortable wagon, and do not probably spend half as much time on their feet as city men. Most of the men in the New York Ninth are thin, wiry boys, with not a single extra ounce of adipose to carry, and take splendid care of themselves. In my judgment, the New Hampshire boys, in the trenches or in a charge, would lay the New York boys out; but on a march, the city boys have the advantage.

"The prescriptions for out-patients have been very numerous—not less, on a moderate calculation, than five hundred for the month. The water at Kalorama contained lime and magnesia, so that diarrhœa troubled the troops somewhat; but plenty of bathing, and a diet of scalded milk and burnt bread proved efficient in checking it. On the march, men are inclined to drink a great deal of water, which troubles them very much afterwards. I myself find that a canteen filled with cold tea, without sugar or cream, is the most refreshing drink on a march, if taken in moderate quantities. Those who get whiskey into their canteens are sure to go down before a march is over, either from sun-stroke or drunkenness."

FORTRESS MONROE.

VARIOLOID AT FORTRESS MONROE—DR. H. A. MARTIN, OF ROXBURY, MASS., ORDERED TO VACCINATE THE TROOPS.

General Butler :—

Sir:—I learn from various authentic sources, that the disease called varioloid has made its appearance in several if not all the regiments encamped about Fortress Monroe, and at "Newport News." I have no doubt but, upon examination, a large proportion of our troops would be found never to have been vaccinated, and of course liable to the small-pox in its unmitigated form. Allow me, therefore, respectfully to suggest, that with the view of avoiding so great a calamity, immediate measures be taken to have every soldier in the service, under your command, faithfully examined, and if need be, forthwith vaccinated.

To this end I would also suggest, that Dr. Henry A. Martin, of Roxbury, Mass., be the one appointed to attend to this important duty, believing as I do, that from his having paid special attention to the investigation of the disease in question, and from his having, as I well know, an ample supply of the best of material for vaccination, he would be the best man to be selected for this service.

G. Kimball, Surgeon, Fort Monroe.

"Order that Dr. Martin be at once sent for, prepared to do this special duty.

B. F. Butler, Major-General Commanding."

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A Correspondent of the Medical and Surgical Reporter writes from Camp Hamilton, near Fortress Monroe, Va., June 12, 1861:—

"All of the camps have suffered somewhat from bowel affections incident to so great a change in diet and habits; very few becoming serious, however. Contagious diseases, we are happily thus far exempt from. Several severe cases of *pneumonia* and *pleurisy* have occurred among the troops, and, since the weather has become very warm, a number have suffered from coup de soleil. On the 10th instant, several regiments were marched ten miles towards Yorktown, and, while on the march, one regiment came upon another, mistook them for enemies, and gave them a volley, wounding quite a number. The force afterwards came upon a battery of the enemy, and were stopped, killing several, and wounding twelve or fifteen. The battery commanded the approaches for half a mile, and all the buildings in the vicinity were in range of the guns; nevertheless, they were occupied as temporary hospitals, and such relief as could be afforded them was there rendered by the respective surgeons of the regiments engaged. We felt sadly in need of instruments—most of us having only a dressing-case. The department states that we shall be furnished with the necessary instruments; one amputating-case and one pocket-case are not sufficient for a regiment, and these are all that is furnished to us, not including so necessary an instrument as a catheter or a bougie—no silver wire or suture pins. Dr. Cuyler, the medical director of this district, would be very glad to furnish us, but he has no supplies. I supposed, when I entered upon this service, that there was some such thing as an ambulance used in war; but such a luxury is not known here—at least we are not provided with anything more than a hand-litter. We were obliged the other day to impress into our service the dilapidated carts and donkeys by the way, and in such rude manner drag at a snail's pace our wounded, under a burning sun, ten miles back to Hampton, where those badly hurt were put on boats, and taken round to the general hospital established by Dr. Cuyler outside the fort for the volunteer forces. This establishment is extensive and well arranged, and, when furnished complete, will accommodate five hundred patients. The building was formerly the hotel at Point Comfort. I was present yesterday while Dr. Cuyler was dressing a very interesting case—that of a man with compound fracture of the femur at the trochanter, the grape-shot entering in front and escaping at the post-gluteal region. The doctor was attempting to save him from the terrible alternative of amputation at the hip-joint. Others were wounded as follows:—one with a compound fracture in the middle third of the thigh, put up and dressed as for ordinary fracture; one suffered amputation of the fore-arm, and one of the arm near the elbow on the field of battle; one shot through the lower part of the abdomen; one shot through the axilla, one in the epigastrium, and one in the back, penetrating the chest, were seemingly doing well."

ALBANY (N. Y.) MILITARY HOSPITAL.

Dr. John Swinburne, *Surgeon to this Hospital*, makes the following report in the *Med. and Surgical Reporter*:—

"I send you herewith a copy of my report, as surgeon of the military hospital at this place, to the Surgeon-General of New York, for the month ending May 31st. During this month there have been five hundred and eighty-six patients treated; the number of diseases being larger than the number of patients, owing to the development of secondary and tertiary diseases, as pneumonia following diphtheria. We have received several with two diseases, as gonorrhœa and rubeola, vaccina and rubeola. [Both in distinct progress at the same time?] A large proportion of those admitted were greatly prostrated, and required stimulants immediately. In no instance has depletion been employed to any extent. In pneumonia, of which there have been twenty-six cases, our principal treatment has been sponging the surface; spts. mindereri and morphine internally; blisters from the commencement, also stimulus and nourishing diet. Of rubeola, or measles, there have been treated one hundred and two cases, there being sixty in the hospital at a time. The greater number of these cases have been of a malignant character, accompanied by very severe sore throat, having a diphtheric appearance. The expectoration has been very profuse, having the appearance of pus. The desquamation resembled that which takes place in scarlatina. In many of them pneumonia supervened; and in all there were more or less typhoid symptoms. In all, stimulants hastened the convalescence. Some of the sour wines, such as champagne, sherry, madeira, etc., when given cold, or with ice, were retained by the stomach, when every other drink, stimulus, or medicine, was rejected.

"During the month there were treated one hundred and twenty-two cases of typhoid diphtheria, some of which were complicated with pneumonia, while only one proved fatal. He was unable to take and retain much stimulus, or food, and hence died on the third day, exhausted. The treatment generally adopted from the commencement, even though the skin was hot and dry, was muriated tinct. of iron f. ʒ i. muriatic acid f. ʒ ss., water Oj.; this is to be taken at intervals of a half hour, or hour, in ℥ ss. doses, or, in other words, as an acidulated drink."

SANITARY INSPECTION OF THE NEW YORK VOLUNTEERS.

STATE OF NEW YORK,
Surgeon General's Office, *June* 25, 1861.

Special Orders, No. 14.

Inspecting Surgeon Alexander B. Mott is hereby detailed to proceed to Washington, D. C., to inquire into, and report to this department, the hygienic condition of the troops from this State, stationed in that city and its vicinity. He will, if possible, visit the different regiments, and gather information upon the following points:—

First. The condition of the camp, its location, drainage, care of the sinks, and the general appearance of the men as respects cleanliness.

Second. The facilities and care employed in *cooking*—the diet; in how much sickness, if any, may be traceable to it.

Third. The hospital facilities of each regiment, the character and quantity of hospital stores, the nature of the medical attendance.

Fourth. He will make suggestions to this department upon any subject which in his judgment will tend to improve and promote the welfare of the troops.

He will report to Major-General Dix, who will afford any needed facilities in the prosecution of his inquiries.

S. Oakley Vanderpoel, *Surgeon-General.*

Medical News.

Count Cavour and his Physicians.—The enemies of Italy must erect a statue to Sangrado. But it is difficult for us to read the accounts transmitted to us of the disease and treatment of Count Cavour with patience. Surely the Papal and Austrian authorities will decree a mural crown to the three physicians who caused the illustrious Cavour to be bled thrice on the first day of his illness, twice on the second, and a sixth time on the third; and when finally he was at the last point of weakness, and beyond the possibility of venesection, placed his bloodless and enfeebled frame in a hot bath, and swathed him in mustard plasters. The combination of fever, repeated loss of blood, heat of weather, hot baths, and mustard poultices, was, indeed, more difficult to sustain than any burden of diplomatic anxiety; and all Europe feels with indignation, that a life which could ill be spared has been sacrificed to the antiquated prejudices of the Italian physicians, who still brandish so recklessly the ancient ensign of surgery. We must not be unjust to those who undertook the grave charge of this great life, in which the liberties of Italy also lived, and we would not aggravate the grief and the pain which the unhappy event of their treatment must inflict. We may set down much of the alleged vacillation in determining the nature of the disease to the restless falsity of rumor, which is fertile in variations. The diagnosis seems to have been pretty clear from the first. The prior symptoms were febrile, and accompanied with cerebral congestion. The physicians ordered six bleedings, and at the end of these, on the second day, the symptoms were already announced in the bulletins to be "typhoid"—that is, weak and asthenic. The true origin of the fever was now clearly seen, for there were marked accesses and remissions of fever at stated intervals. The accesses were preceded by shivering fits, and the attack was declared to be double tertian ague. The loss of blood produced delirium in the periods of accession; nevertheless the bleedings were continued up to the seventh time, the physicians apparently taking fresh courage at each natural remission of the fever; and, finally, on the last day, we read that a hot bath was ordered, to produce a weakening effect (*affaiblissement*), because they dared no longer bleed. The surface was now cold, and so mustard plasters were applied. Thus was this great Minister tortured, and brought surely within the clutches of death. Seneca chose to seek death by opening his veins in a warm bath, and there quietly allowing his life to ebb away. The substitution of seven successive bleedings *ad deliquium*, with the intercurrent application of mustard plasters and cabinet councils, to conclude with the hot bath and more mustard plasters, seems to us to be a more cruel, but hardly a less sure device.—*London Lancet.*

The Pay of Surgeons and Assistant Surgeons in the U.S.A.—We extract from Professor Hamilton's late work on "Military Surgery," the following:

	Pay per month.	No. of rations per day.	Amount of rations per month.	No. of horses for which forage is allowed.	Amount for forage per month.	Servants.					Aggregate amount receivable.
						No. for which pay is allowed.	Amount allowed for pay per month.	Amount allowed for clothing per month.	Amount allowed for rations per month.	Total amount allowed per month.	
	$		$		$		$	$	$	$	$
Ass. Surg. under 5 years' service......	53.33	4	36	1	8	1	12	2.50	9	23.50	120.83
Ass. Surg. over 5 yrs.' service............	70.00	4	36	1	8	1	12	2.50	9	23.50	137.50
Ass. Surg. over 10 years' service.. ...	70.00	8	72	1	8	1	12	2.50	9	23.00	173.50
Surgeon under 10 yrs.' service............	80.00	4	36	3	24	2	24	5.00	18	47.00	187.00
Surgeon over 10 yrs.' service............	80.00	8	72	3	24	2	24	5.00	18	47.00	223.00

The allowance for forage and servants is only paid to the Surgeons and Assistant Surgeons, when they actually employ and keep in service the number of servants and horses charged for. In addition to the above, Surgeons and Assistant Surgeons are allowed an additional ration per diem, after the termination of every five years' service.

A Rare Tract on Plague.—Mr. Radcliffe directed the attention of the Society to a very rare and curious tract on plague recently printed by the Bannatyne Club, "page for page, from the only known copy preserved in the Advocates' Library." The author of the tract was Dr. Gilbert Skeyne. He was a descendant of an ancient Scottish family, and was educated at the Grammar School and King's College, Aberdeen. He graduated as a Master of Arts, and subsequently applied himself to the study of medicine, and took a doctor's degree. In 1556, he was appointed "Medicinar," or Professor of Medicine, in King's College; and, while holding this position, he wrote the tract on plague now reprinted. In 1575 he removed to Edinburgh, and in 1581 he was appointed a physician to King James VI. The tract was first published in 1568. It contains a popular exposition of the causes, symptoms, and preventive medicine of plague, in the vulgar tongue, and is highly interesting, not only on this account, but also from its presenting a summary of the opinions which may be supposed to have been entertained on plague by Scottish physicians about the middle of the sixteenth century.—*British Medical Journal.*

Original Lectures.

A COURSE OF LECTURES ON CHANCRE,

DELIVERED AT THE BALTIMORE INFIRMARY.

BY
WILLIAM A. HAMMOND, M.D.
PROFESSOR OF ANATOMY AND PHYSIOLOGY IN THE UNIVERSITY OF MARYLAND, SURGEON TO, AND LECTURER ON CLINICAL SURGERY IN THE BALTIMORE INFIRMARY.

Lecture II.

Gentlemen:—In the last lecture, the subject of soft or simple, non-indurated, non-infecting chancre, was considered. I pointed out to you how this form of venereal disease could in general be recognised, and how important it was that you should be able to discriminate between it and the indurated and infecting chancre. The more important complications which attend the progress of the soft chancre were also alluded to, as were likewise the two species of bubo which sometimes accompany or follow this variety of venereal ulcer.

In the present lecture, I design indicating to you the plan of treatment which I have found best suited to this species of disease; and as there are a number of cases in the house in which it is being carried out, I think I shall be able to inculcate the principles which should guide you, by that best of all methods—observation.

You will be much more frequently called upon to treat simple than indurated chancres. Out of one hundred chancres, seventy-five will be of the former character. Fournier makes the proportion somewhat smaller. Thus, out of three hundred and forty-one cases, one hundred and twenty-six were indurated, and two hundred and fifteen simple. M. Riche has found the ratio to be the same that I have stated, one in four being indurated. My notes show that of two hundred and eighteen cases of chancre, in which I have noted the character, fifty-four were indurated, and one hundred and sixty-four soft, so that the proportion is as near as possible to that above given.

Now there are two circumstances to which I have called your attention, which pre-eminently influence us in the treatment of the simple chancre. 1st. You must not forget that it is altogether a local disease; 2d. That it is liable to extensive ulceration and phagedena. The former fact does away with any necessity for the exhibition of mercury, and the latter renders such a course not only improper but highly dangerous. At the same time it is desirable to destroy as soon as possible the specific character of the chancre, and to convert it into a simple non-virulent ulcer.

The reasons for this are very obvious. You will recollect that I stated to you that the soft chancre was exceedingly contagious. A person may have half-a-dozen or more present at the same time, either as original sores, or, what is more usually the case, caused by the pus from a single chancre. These are more generally met with on the genital organs, or in their neighborhood, from the fact that the virulent pus has more intimate relations with these parts. It is not uncommon to find them about the anus of both sexes, on the scrotum, the labia, thighs, &c. But the pus may be carried to other regions by the fingers; and consequently, no part of the body, unless it is the head, is exempt from the contagion of the simple chancre. By destroying at an early stage the specificity of the chancre, the contagious character is also annihilated, and new chancres prevented.

Another reason for this treatment is, that the liability to the formation of a virulent bubo is greatly lessened, and if it is sufficiently prompt, altogether destroyed.

Now the manner in which this may be most effectually done is by cauterization. There is no end to the caustics which have been recommended for the purpose. Vidal, who, however, did not lay sufficient stress upon this principle of treatment, employed the nitrate of silver. Ricord formerly used the Vienna paste, a mixture of quick-lime, five parts, and caustic potash, six parts, made into a paste with alcohol; and the monohydrated nitric acid, the acid nitrate of mercury, chloride of zinc, the actual cautery, and numerous others have been lauded by their proposers. I have employed all of these at times, but have found nothing so manageable, and at the same time so effective, as the sulphuric acid and charcoal paste recently recommended by Ricord. This is prepared by taking strong sulphuric acid, and making it into a paste with sufficient finely powdered charcoal. The chancre is covered with this, and the mixture is allowed to remain undisturbed for three or four days. At the end of this period the paste falls off, bringing with it the slough which it has produced, and having underneath a healthy sore, the specific character of the chancre having been entirely destroyed.

As soon therefore as you have definitely ascertained that a soft chancre is present, provided always that you see it before it has commenced to heal, apply the paste, and cover the part with a piece of lint spread with simple cerate. Let it remain, changing the lint as occasion requires, till the slough is spontaneously detached. After this event has taken place, dress the healthy sore which now exists with a solution of tannin in water, one, two, or three grains to the ounce, and it will, in the great majority of cases, speedily heal.

The inconveniences of this plan are, first, that it causes very considerable pain; and second, that it is sometimes difficult to apply the paste to the chancre, owing to the situation in which it occurs.

The first is not a very serious objection, and when we take into consideration the purpose of our treatment, one not entitled to come in conflict with it. The annoyance from this source is certainly not greater than that caused by the other powerful escharotics mentioned; and so far as my observation extends, much less than that produced by the nitric acid. It is well, however, to mitigate the pain, when severe, by opium, of which a full dose may be given.

The other objection mentioned is of more consequence. It is undoubtedly difficult to manage the paste, when it is necessary to apply it to the vagina, or to any other part of the body where opposed surfaces come in contact, for the reason that ulceration may be thus caused in perfectly healthy tissues. To some portions of the body, as the rectum and urethra, it does not at all admit of being applied; but then the same is true of any other escharotic material of similar power.

I think, however, that with proper care you will generally be able to use this paste with advantage, when it can be employed at all. I have frequently applied it to chancres seated in the little pouch between the vagina and the neck of the womb. To do this, it is of course necessary to use the speculum. In addition, I employ a glass rod with a cup-shaped depression at one end, the end being enlarged with which to bring the paste in contact with the chancrous surface. I then place a dossil of lint spread with cerate, and several more wet with water over this last. The patient is then kept in bed till the acid has been absorbed into the diseased part, which is accomplished in five or six hours. In this way, I rarely have any trouble.

In using this or any other escharotic for the destruction of chancre, you must not be timid. As Ricord has well said, it must be applied to a surface considerably greater in circumference than the chancre, and you must also put on enough to soak well into the base, and through the thickness of the ulcer to the healthy tissue below. If a spot no larger than the head of a pin be left untouched, your trouble and your patient's pain will go for naught, as the surface left after the detachment of the eschar will become inoculated afresh. Deal with it therefore in the spirit of liberality, if you wish to be successful in its management.

When the chancre is situated within the rectum, I prefer to use the nitric acid to destroy its specificity. This agent may be readily applied with the glass brush, having previously dilated the bowel, and brought the parts well into view with the speculum. A dossil of lint thoroughly soaked in olive oil is next inserted, and left in as long as is convenient. It may be necessary to repeat the application.

As to urethral chancres, you will never find them seated beyond the fossa navicularis. In this position they can be brought into sight with the urethral speculum, and the nitric acid applied in the manner above described.

The treatment which I have recommended is not applicable to the soft chancre in process of healing. As I have already stated to you, after reparation has advanced, the specific character of the chancre is very much lessened if not entirely lost, and the sore is nothing more than a simple ulcer. At this stage it is to be treated with astringents or slightly stimulating applications. Among the best of these is the wash of tannin previously mentioned. Many cases which enter the Infirmary, are already in process of separation, and therefore are at once subjected to this treatment. Occasionally when the granulations are too exuberant, I destroy them with the nitrate of silver freely applied; and when they are deficient, I stimulate the surface by the gentle application of the same substance.

Besides the tannin lotion, sulphate of zinc, acetate of lead, and nitrate of silver solutions may be used. These should be weak, and should be frequently applied, or, what is still better, the chancre should be kept constantly moist with them. Ointments are not, in my opinion, as efficacious as the lotions.

As to constitutional treatment, it is rarely that any is required. If there is any great debility, iron and quinine may be given with advantage. The bowels should always be kept open, and the diet should be attended to so far as to take care that nothing indigestible is eaten, or excess of any kind committed. Beyond this, no special precautions are necessary. If your patient is in the habit of taking a glass of wine at dinner, there is no reason why he should not continue to do so. In fact, I am satisfied that surgeons who cut off wine, coffee, beefsteaks, cigars, &c., from patients in the habit of using them, do more harm than good.

A patient afflicted with chancre should avoid sexual intercourse. Aside from the dishonesty of the matter, with which, however, it does not come within the scope of these lectures to concern ourselves, connexion is injurious, as tending to produce inflammation, and perhaps, under certain circumstances, ulceration and phagedena. If there is any tendency towards erotic excitement, lupulin, or what I have generally found much better, camphor, may be given with advantage.

Of course, the most perfect cleanliness should be practised. The patient should be instructed to cleanse the chancre frequently during the day with castile soap and water, applied with a sponge. In women with chancres situated within the vagina, a syringe must be used.

I have now, I believe, considered sufficiently the treatment of soft chancres when they run a perfectly regular course. In the next place, the accidents to which they are liable require our attention.

The first of these to be considered is inflammation. This may occur at any period, may have no assignable cause, or may be due to mechanical or medicinal irritation, as has already been stated. Its presence contra-indicates the employment of escharotic or stimulant substances. Emollient applications, such as mucilage of flax-seed, warm water, poultices, &c., are to be used. One of the best and most elegant articles consists of a cataplasm of chamomile flowers. This retains its heat and moisture for a lengthened period, and exerts a very soothing influence over the inflamed tissues. It should be changed frequently. In addition, the most perfect rest in bed should be enjoyed, as moving about not only mechanically irritates the part, but increases the constitutional disturbance. A mild purgative should be given, and then opium in doses of a grain every four or five hours should be administered. In addition, much benefit will be derived from the employment of the tincture of the chloride of iron in large and frequently repeated doses. I have witnessed the most decided results from the use of this substance, especially when there is a tendency to gangrene. I usually give it to the extent of thirty or forty drops four or five times a day.

General blood-letting is, I think, never necessary; and the local abstraction of blood, though sometimes admissible, will seldom be called for. Should it be deemed advisable, a few leeches may be applied to the inflamed tissues in the vicinity of the chancre, taking care that the bites do not become inoculated.

Stimulants are more generally serviceable. When the pulse is frequent, the pain dull, and of an aching character, and the parts livid and unhealthy-looking, much benefit will be derived from the employment of porter, wine, or brandy, in moderately large quantities. In such cases, alcoholic stimulants, with the iron as mentioned, will act like a charm. I have witnessed this too frequently to be mistaken.

Phymosis and paraphymosis may occur as consequences of the inflammatory engorgement.

In the former, beware of endeavoring to retract the prepuce, if any considerable effort is required to effect it, or you may cause paraphymosis, which is much more troublesome. In both, you will find that warm applications and the soothing plan of treatment will generally do all that is necessary. Should gangrene threaten, run a director under the prepuce, and slit it up with the probe-pointed bistoury till the constriction is removed.

In paraphymosis, mild attempts may be made at reduction by compressing the glans gradually and firmly, at the same time pressing the ring of prepuce forward with the index fingers and thumbs of both hands. Should this plan not succeed, and should the constriction be so great as to threaten mortification, the stricture should be divided by running a straight, sharp-pointed bistoury under it, and cutting outwards. If any part remains undivided, it can be cut with the scalpel; after which operation, the chamomile cataplasm should be applied.

If gangrene should occur in spite of all your efforts to prevent it, mildly stimulating applications, such as dilute nitric acid, or the dilute solution of the chloride of zinc, may be employed with advantage. After the inflammation has in a measure subsided, the sloughs, if still adherent, may be removed with the knife. Both in phymosis and paraphymosis, it is the prepuce that generally suffers, and not the glans.

In the next place, ulceration requires consideration, as one of the accidents to which the soft chancre is liable. I have already called your attention to the characteristics of this complication. The management of it requires both patience and skill, but ordinarily is not attended with any great difficulty, unless the form of ulceration be serpiginous, in which case the surgeon may be thwarted for a long time in his efforts to effect a cure.

In ordinary cases of excessive ulceration the sulphuric acid paste is generally the best application that can be used. The specific character of the ulcer is destroyed by it, and a healthy sore left after the detachment of the eschar, which is not so liable as the chancre to enlarge. At the same time opium given internally to the extent of a grain night and morning, is a useful adjunct. If the sore produced by the escharotic should show a tendency to spread, strapping with adhesive plaster is an excellent means of arresting it, and at the same time a chalybeate with the opium should be given.

The serpiginous ulcer is more difficult of cure. Months, and even years, sometimes elapse before permanent reparation is effected. I am disposed to think from what I have seen of such cases, that a scrofulous taint is always present, and certainly the results of the treatment I have adopted for them would seem to support this view. I have tried the sulphuric acid paste in this form, as well as other escharotics, but have almost invariably found that the resulting ulcer was possessed of the same tendency to spread as the original one. Mercury given internally, or applied locally, I have always found to aggravate the morbid condition, although Acton appears to have some confidence in its efficacy.

Arsenic acts better. I have employed it both internally and locally, Fowler's solution for the first, and the arsenious acid for the latter. One grain of the acid rubbed up with one hundred grains of white sugar, and the twentieth part sprinkled over the ulcer every day, and fifteen drops of Fowler's solution taken three times per day, will frequently cause a very favorable change.

But I have derived more satisfaction from the use of iodine than from any other agent. Internally I give it in the form of Lugol's solution, accompanying it with some preparation of iron, and occasionally with cod-liver oil, whilst at the same time I apply the strong saturated tincture to the ulcer and neighboring parts every day. I have never seen a case resist this treatment. I am therefore anxious to impress its advantages upon you, for these serpiginous chancres are very annoying things both to patient and surgeon. I am sorry there is not a case now in the house, for I should like to make you acquainted with its features, and also with the method of treatment I have mentioned, by ocular demonstration. In practice you are not likely to meet with many instances. During the last thirteen years I have treated twenty-two cases, but then I have had all kinds of people to deal with, and for a part of the time mentioned resided in localities where venereal diseases were more frequent than any other. However, I shall have opportunities of bringing this form of complication before you ere long, and in the meantime will relate to you the details of a case which a few years since came under my charge.

J. T. contracted a chancre on the prepuce, for which he was treated by the local application of the nitrate of silver, and the internal administration of the protiodide of mercury. The chancre continued to enlarge, and the nitrate of silver was changed for sulphate of copper, and at length strong acetic acid was employed. The gums became sore from the mercury, which was then stopped, and the iodide of potassium substituted. Not getting any better, he applied to me.

I found on the prepuce a chancre extending from the frænum to the scrotum, and about half an inch in width. Its original position had been fully an inch to the right, and it had gradually reached its present location, at the same time having trebled in length during the past six months. It was not straight, but wavy. There was but little appearance of inflammation about it. The base of it was hard from medication, and the floor of a dirty grey color. The amount of discharge from it was not great, neither was there any bad smell about it. Inoculation gave a negative result. Notwithstanding the size of the sore, I applied the undiluted nitric acid freely to it. In a few days an extensive slough was detached. The ulcer looked healthy, and I flattered myself it was about to cicatrize. I was, however, mistaken. It did heal on one side, but advanced on the other until it had assumed a horse-shoe form. During all this time the patient was taking the bi chloride of mercury in doses of the one-sixteenth of a grain three times per day. This was continued till his system was fully under its influence, when, it being very evident that no good result was to be obtained from its use, I discontinued it.

The patient had now been over three months under my charge, and was no better than before he came to me. The ulcer had now entirely surrounded his penis, being still the shape of an elongated horse-shoe. I now ascertained, what I ought to have found out before, that the patient's family were scrofulous; a brother and two sisters having enlarged lymphatic glands in the neck, and his mother having extensive cicatrices in the same situation. I therefore determined to try the efficacy of iodine in his case, and therefore administered Lugol's solution, and applied the strong tincture of iodine to the ulcer; at the same time, full diet and porter were directed. Within a week the signs of amendment were evident. The arms of the horse-shoe became much smaller, whilst the arched portion ceased to extend. Then it commenced to cicatrize at both places, and in almost six weeks had entirely healed. For a year afterwards, at least, he was in perfectly good health. I then lost sight of him, but have no doubt that he remained cured.

I have a case of serpiginous chancre now under my charge, in which for the last two years all the ordinary methods of treatment have been tried without effect. It occupies the left side of the glans, and is of semicircular shape. Although the patient has only been under the iodine treatment for twelve days, he has already commenced to improve, and the chancre is healing from the entire circumference. In his case I am also using cod-liver oil and iron, for the reason that he was pretty well broken down in constitution.

You are not, however, to suppose that all cases are as amenable to treatment as those I have cited. I have, however, as has been mentioned, never treated a case of serpiginous chancre ineffectually with iodine. Sooner or later the patient gets well, but it may be four or five months before this desirable result is attained. You should therefore persevere with the treatment I have recommended.

In the next lecture I shall consider the treatment of phagedena and of the buboes produced by the soft chancre.

Original Communications.

CASE OF EXSECTION OF PORTIONS OF THE EIGHTH, NINTH, AND TENTH DORSAL VERTEBRÆ,

WITH A SUMMARY OF TWENTY CASES IN WHICH THE OPERATION HAS BEEN PERFORMED.

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[Read before the New York State Medical Society, as a contribution from the Kings County Medical Society, February, 1861.*]

Patrick McG., aged thirty-five years, while engaged in painting oil cloths at Harvey's factory, in this city, on the 19th of Dec., 1857, fell from the scaffold on which he was standing to the floor, a distance of about fifteen feet. He was picked up in an insensible condition, and removed to an adjoining room, where I saw him within half an hour after the accident. His appearance indicated that he had received some serious lesion, being much prostrated, and complaining of great pain in the abdomen. After examining him anteriorly without detecting any injury except a slight incised wound on the left fore-arm, he was placed on his belly, when I discovered fracture of the dorsal vertebræ. Brandy was given freely, and he was conveyed to the Brooklyn City Hospital, after having received the last rites of his church. On examining him with more care after he entered the hospital (two hours after the accident), I found the spinous processes of the eighth and ninth dorsal vertebræ depressed, and indistinct crepitus could be obtained at that point. There was also complete loss of motion and sensation below a line drawn across the umbilicus; reflex action could not be excited; mind wandering; priapism; reaction very imperfect. He was placed on a water bed, urine to be drawn off every eight hours. On the third day I observed that the spinous processes, which had been previously depressed, were abnormally prominent. A cough, which he had before the accident, was increased, respiration oppressed, mucous and subcrepitant rhonchi in the lower portion of the right lung, percussion normal.

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* This paper is not precisely as read before the State Medical Society, and to be published in the Transactions, but has been revised by the author.

Ordered a cough mixture, local depletion over the seat of injury, and ol. ricini ℥ss., which produed two involuntary evacuations.

On the seventh day the urine passed involuntarily, and from that time until his death it dribbled constantly. The symptoms now indicated a fatal issue, and believing that the spinal marrow was compressed by the displaced fragments of the vertebræ, I proposed to relieve it by elevating or removing the depressed bones. This proposition was thoroughly discussed in consultation with my colleagues, Drs. Minor, Enos, Kissam, and Isaacs, and after much deliberation the operation was decided upon. "Without surgical interference death is inevitable sooner or later; why not therefore give the patient the benefit of the chance afforded by an operation, which cannot in itself add to the serious mischief already existing?" "*anceps remedium potius quam nullum.*" Such were the considerations that determined our decision. Accordingly, on the 29th December, 1857, ten days after the receipt of the injury, the patient was removed to the operating theatre on a bed, where, assisted by my *confrères* of the surgical staff, and in the presence of a number of medical gentlemen, I performed the following operation.

The patient was placed on his left side and subjected to anæsthesia, when an incision about seven inches in length was made down to the spinous processes of the injured vertebræ. The muscles were then dissected off and held aside by curved spatulas, so as to expose completely the posterior aspect of the eighth, ninth, tenth, and part of the eleventh dorsal vertebræ, as far as their transverse processes. It was now ascertained that the eighth and ninth spinous processes were fractured through their bases. These being removed by a few touches of the scalpel, that portion of the spinal cord covered by the ninth process was exposed. The tenth vertebra was fractured through its arch on either side near the root of its transverse processes, and having cut through the supra and inter-spinous, and yellow ligaments, which connected it to the adjoining vertebra, I seized hold of its spinous process with a strong pair of tooth forceps, and endeavored to remove the fractured portion. Having failed in this, I cut through the arch on either side just within the seat of fracture, by means of Hey's saw and the bone forceps; and removed all the fragments that were loose, or likely to exert pressure upon, or irritate the cord. The spinal marrow was exposed to the extent of one and a quarter inches in its length, and was covered by a thin layer of coagulated blood, except at one point, where the dura mater could be seen. There was no pulsation in the cord, which induced us to suspect that it had been seriously injured by a fracture of the body of a vertebra. The edges of the wound were approximated with adhesive straps and covered with greased lint, and the patient was removed on a bed to the ward, lying on his left side. After the effect of the anæsthetic had subsided, I could discover no improvement in the symptoms. The paralysis persisted, the urine continued to dribble, and the fæces to be discharged involuntarily.

On the seventh day after the operation, the house surgeon, Dr. F. D. Cunningham of Richmond, Va., and J. Steeves of the Province of New Brunswick, observed a sort of suction movement at the bottom of the wound at each inspiration, as if air were drawn into the chest from its surface, through a small external opening. Coincident with this phenomenon the pulse became more frequent, and respiration more rapid and labored. He died January 7th, 1858, twenty days after the receipt of the injury, and ten days after the operation.

Autopsy.—Surface of the wound in a sloughy condition. When the ribs were cut through on the left side in the process of removing the fractured vertebra, the left pleural cavity was found to be filled with serum containing pus and lymph, and the left lung was compressed against the spine. This condition was probably produced by a spiculum of bone from the fractured vertebra, which penetrated the pleura, and allowed the air to enter its cavity during inspiration as noted above. The six lower dorsal vertebræ were removed, and presented the following conditions:—The spinous processes of the eighth and ninth were fractured at their junction with the laminæ, and were removed, it will be remembered, during the operation. There was also fracture of the body of the ninth, on the left side near its superior surface, and its left transverse and oblique processes were fractured through their bases. The body of the tenth vertebra was comminuted and compressed between the vertebra above and below into a wedge shape, the point being forward; a portion of its upper front surface was torn off and remained attached to the vertebra above; both transverse processes were fractured through their bases; the lamina was also fractured, as well as the left articular process. The body of the eleventh vertebra was fractured on the right side near the upper surface. The ninth and tenth ribs were broken in two places near their heads. The spinal marrow was torn and in a state of disorganization at the junction of the ninth and tenth vertebræ.

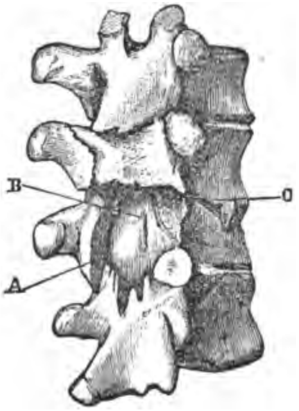

ILLUSTRATION.

A, Point at which saw was applied on left side; the corresponding point on opposite side has been detached from the specimen and lost. B, Cord dried in the specimen. C, Fracture of the body of tenth vertebra. The illustration also shows where the eighth and ninth processes were removed.

Although originally suggested by Paulus Ægineta, the operation for trephining or exsection of the vertebræ, and for removing depressed fragments, was not performed until 1814, when Mr. Henry Cline, considering a depressed fracture of the vertebræ analogous to fracture with depression of the cranium, performed it for the first time. With the facilities afforded by the libraries of the New York and Brooklyn City Hospitals, and the private libraries of several medical gentlemen, assisted by my friends and former pupils, Drs. A. D. Willsen and E. Lynch, I have obtained a record, more or less complete, of nineteen cases in which the operation has been made (the case now recorded making twenty), a summary of which is given below.

Case I.—H. Cline, Jr., operator, 1814; male, adult. Symptoms before the operation not mentioned, except displacement of the spine. Operation one day after the injury. Parts removed were spinous processes of eleventh and twelfth dorsal vertebræ, which were broken at their roots, and arch of one vertebra (not specifying which); condition of spinal cord not mentioned. *Result.*—No relief; convulsions on first and second day, and death on third day after operation. *Post-mortem.*—Body of twelfth dorsal vertebra fractured; eleventh moved forward so as to compress the cord between its arch and the back of the body of the twelfth; spinal marrow and its membranes torn through.—*Chelius's Surg., Am. Ed.; note by Lent, Vol. I., p.* 590.

Case II.—Oldknow, operator, 1819; male, adult. Operation on sixth day after injury. Parts removed were spine and portion of arch of seventh cervical vertebra. Died. *Post-mortem.*—Blood effused along whole dorsal vertebræ, between internal vertebral ligament and dura mater, not sufficient to occasion injurious pressure. Dura mater increased in density, and thickened at seat of injury; increased vascularity of pia mater; healthy organization of cord destroyed; roots of spinous process fractured and forced under its connexions with superior oblongata process.—*Sir A. Cooper on Dislocations and Fractures, Am. Ed.* 1851.

CASE III.—Wickham, operator, 1817 (Velpeau); male, adult. Prominent symptoms before the operation were, complete paralysis of the body and inferior extremities; partial paralysis of superior extremities; fracture and displacement of seventh cervical vertebra. Operation on eighth day after injury; portion of seventh cervical vertebra was removed. *Result.*—Patient was in a degree relieved; his breathing became more free, and sensation returned to a considerable extent. Died on second day after operation.—*Sir A. Cooper's Lectures; note by Tyrrell, Vol. II, p.* 20, *London,* 1825.

CASE IV.—Tyrrell, operator, 1822; male, aged twenty-five. Prominent symptoms, paralysis and anæsthesia below superior edge of pelvis; twelfth dorsal spine depressed. Operation on fourth day after injury; parts removed were spinous processes and arches of twelfth dorsal and first lumbar vertebræ. Two inches of cord were exposed; it pulsated; membranes not injured. *Result.*—Sensation gradually increased for five days. Died on thirteenth day after operation. *Post-mortem.*—Cord and membranes apparently healthy, with the exception of a deposit of lymph on the portion of dura mater exposed by the operation; fracture of body of vertebræ. "Died of inflammation of bladder."—*Sir A. Cooper's Lectures, note by Tyrrell, p.* 11.

CASE V.—J. R. Barton, operator, 1824; male, adult. Prominent symptoms before operation were paralysis of lower part of the trunk and inferior extremities; urine and fæces voided involuntarily. Operation on twelfth day after injury. Spinous process and arch of seventh dorsal vertebra removed. *Result.*—Sensibility began to return in lower extremities after about forty-eight hours; died on third day after operation. *Post-mortem.*—Posterior mediastinum contained about half a gallon of blood; seventh and eighth dorsal vertebræ dislocated from each other; body of the ninth fractured; blood effused throughout spinal canal.—*Godman's Ed. of Sir A. Cooper on Dis. and C., p.* 513.

CASE VI.—Tyrrell, operator; 1827; male, aged twenty-six. Prominent symptoms before operation were paralysis and anæsthesia of lower extremities; no power of voiding urine; displacement (?) of last dorsal or first lumbar vertebra. Parts removed were spinous process and arch of twelfth dorsal vertebra; spinal cord and its membranes were apparently uninjured at the time of the operation. *Result.*—Imperfect sensation was noticed four hours after operation, below the seat of injury, which disappeared before death. Died on eighth day after operation. No *post-mortem.* "The symptoms indicated that cause of death was seated in pleura and lungs."—*Med. Chirurg. Review, Vol. X., p.* 601.

CASE VII.—D. L. Rogers, operator, 1834; male, aged thirty-one. The prominent symptoms before the operation were paralysis and anæsthesia of lower extremities; spine of first lumbar vertebra depressed. Operation on second day after injury. Parts removed were spinous process of last dorsal, spinous process and arch of first lumbar vertebra; two inches of cord were exposed and covered with blood, but were apparently uninjured. *Result.*—About fifteen minutes after the operation he said he was much relieved; sensibility returned to lower extremities; respiration became easy; and with the assistance of an anodyne he slept for several hours. Died on eighth day after operation. *Post-mortem.*—Body of first lumbar vertebra fractured, but not displaced; cord seemed to be healthy.—*Am. Jour. Med. Soc., vol.* 16, *p.* 90, 1835.

CASE VIII.—H. A. Potter, operator, 1844; male, aged thirty-one. Prominent symptoms before operation were paralysis and anæsthesia below upper part of thorax, bed-sores, and abscesses. Operation three months and ten days after injury. Portions of four inferior cervical and two superior dorsal vertebræ were removed; at time of operation pulsations of cord were seen and felt. *Result.*—Sensation returned almost immediately, and four or five hours after the operation, it was nearly perfect from the seat of injury to the toes. Died on eighteenth day after operation. No *post-mortem.* "Death apparently from suppuration of the lungs."—*New York Journ. Med., vol.* 4, *p.* 174, 1845.

CASE IX.—A. G. Smith, operator, no date; male, adult. The prominent symptoms were "paralysis of all the members, except the muscles above the elbows." Operation two years after injury. Parts removed were portions of spinous processes of first, second, and third, and whole of spinous process of fourth dorsal vert. *Result.*—Sensibility returned in hands and thighs. The final result is not given, and the case is very imperfectly reported.

CASE X.—G. C. Blackman, operator, 1854; male, aged forty-four. Prominent symptoms before the operation were, complete loss of sensation and motion in lower limbs; urine and fæces voided involuntarily; some irregularity of upper and posterior part of sacrum. Operation four years and five months after injury. Part removed was one and three-fourths inches of upper and posterior wall of sacrum, which was found to be depressed. *Result.*—Became conscious of the passage of urine in a few hours; next day had strange sensations about the rectum, and was aware when fæces were voided; sensibility gradually returned to lower extremities, and at end of five weeks had gained considerable voluntary motion in limbs. Dr. Smith Ely, of Newburgh, says in a letter to the writer, dated Feb. 7th, 1861: "I visited him" (the patient on whom Dr. Blackman operated) "this morning, and in answer to my inquiries he said he was not conscious of any permanent relief having followed or resulting from the operation. He has no power of motion in lower extremities. The present circulation of the parts is the same as before the operation."—*Blackman's Ed. of Velpeau's Surg., vol.* 2, *p.* 392; *and Dr. Ely in MS.*

CASE XI.—G. C. Blackman, operator, 1854. Operation performed five hours after injury. Parts removed not mentioned; seat of injury was the upper dorsal vertebra. *Result.*—Died on eighth day.—*Blackman's Ed. Velpeau, vol.* 2, *p.* 393.

CASE XII.—Blair, operator. No date given; said to have recovered. No further account could be obtained.—*Ballingall's Outlines of Mil. Surg., p.* 321.

CASE XIII.—Stephen Smith, operator, 1858; male, aged forty-one. Prominent symptoms before operation, were paralysis and anæsthesia below sixth intercostal space. Operation on day after the injury. The arch of tenth dorsal vertebra was removed. *Result.*—No relief; died soon after operation. *Post-mortem.*—Fracture of body of tenth dorsal vertebra without displacement; fracture of arch, with slight depression; extravasation of blood from lower cervical vertebra to sacrum.—*New York Journ. Med., vol.* 6, *p.* 87, 1859.

CASE XIV.—Joseph C. Hutchison, operator, 1857; male, aged thirty-five. Symptoms before operation were paralysis and anæsthesia below umbilicus; urine and fæces voided involuntarily. Operation on tenth day after injury. The spinous processes of the eighth and ninth, and arch of tenth dorsal vertebra, were removed; there was no pulsation in the cord; it was covered with a thin layer of coagulated blood. *Result.*—No relief; died on tenth day after operation. *Post-mortem.*—Fracture of spine of eighth dorsal vertebra; fracture of body, and oblique spinous and left transverse processes of ninth; comminuted fracture of body of tenth; slight fracture of body of eleventh dorsal vertebra; comminuted fracture of ninth and tenth ribs; spinal marrow in a state of disorganization; left pleura filled with serum, containing lymph and pus; being compressed against spine.—*Trans. of New York State Med. Soc.,* 1861; *Am. Med. Times, July,* 1861.

CASE XV.—Laguier, operator, 1840. Part removed was "base of spinous process of ninth dorsal vertebra." Died on fourth day after operation.—*Malgaigne on Dis., etc., Amer. ed. p.* 341.

CASE XVI.—Holsher, operator, 1828. Died. No further account could be obtained.—*Velpeau's Surg.* 1*st Am. ed. vol.* 2, *p.* 737.

CASE XVII.—Heine, operator. Died.—*Ibid. p.* 737.

CASE XVIII.—Roux, operator. Velpeau says: "Roux was obliged to have recourse to the operation in removing an enormous cancerous mass from the back, in a patient whom I saw." Result not stated; it was no doubt unfavorable.—*Ibid, p.* 737.

CASE XIX.—Attenburrow, operator. Died. No particulars given.—*Sir A. Cooper's Lectures, note by Tyrrell, vol.* 2, *p.* 20.

CASE XX.—Edwards, operator, 1838. Prominent symptoms before operation, were paralysis of the organs of locomotion, the rectum, and bladder. Part removed was arch of lumbar vertebra. *Result.*—Operation noticed in a review of Sir C. Bell's Institutes of Surgery. "It was performed successfully, as we are informed, only a few months ago, by a surgeon of the name of Edwards, in South Wales. * * * The arch of the bone was raised, the symptoms of compression relieved, and the patient did well."—*Brit. and For. Med. Rev., vol.* 6, *p.* 162, 1838.

Remarks.—A feature worthy of note in the case recorded by the writer, and in other cases mentioned above, was the extent of the injury to the vertebra and spinal cord, of which we were of necessity ignorant before the operation; and this suggests in a small compass the leading arguments against it, viz. 1. We cannot in any case know the amount of injury which the vertebræ have sustained; whether there is fracture of the processes or of the bodies. 2. We are also ignorant of the extent of the mischief which has been inflicted on the cord, whether it be compressed, or lacerated, or divided; consequently the operation may be inadmissible on account of the state of the bones or of the cord. If the case presented any features which would satisfy the surgeon that the fracture of the bone was limited to the arch, or that the cord was sound, or if there was any reasonable probability that such was the case, I suppose the operation would be justifiable. But this state of the question virtually decides it in the negative, except perhaps in such cases as Nos. 8, 9, 10, in the table, where the patients survived the immediate effects of the injury, and were operated on several months or years subsequently.

The operation is said to have been successful in two cases, Blair's (No. 2), and Edwards's (No. 20). It is a little remarkable that with results so unique, these cases should not be recorded except in the incidental notice referred to above. One case, Blackman's (No. 10), which Dr. Ely says was not benefited by the operation, to say nothing of cases 12 and 20, demonstrates that the operation is not "inevitably fatal," as stated by Sir C. Bell. It received the high sanction of Sir A. Cooper, but has been condemned by Malgaigne, Bell, Brodie, and our distinguished American authority, Prof. Hamilton.

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REMARKS ON ATROPHIC FATTY PALSY IN INFANCY.

BY

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Infantile Atrophic Fatty Palsy is a new name introduced in science by Dr. Duchenne de Boulogne* for a disease which, though known by most authors, has, however, not been well classed nor studied in its progress and termination. This so-called affection is not a distinct one, but an abnormal and consecutive state of the muscles during the advanced stage of paralysis, principally due to changes in nutrition after long rest. Looking at the facts as exposed by Dr. Duchenne de Boulogne, they will be found confirmatory of this view. The characters of the disease, he says, bear altogether such a resemblance to those of spinal paralysis, that we are induced to consider infantile atrophic fatty palsy as the result of a morbid state affecting the spinal cord. As regards the symptoms: paralysis, atrophy, and a more serious lesion in nutrition of certain muscles, viz. a fatty substitution, are the principal phenomena of the disease, at times supervening after continuous or intermittent fevers, or complicated with cerebral accidents (convulsions, eclampsia, contractura, &c.). The more protracted the disease, and the more deeply nutrition of the muscles is affected, the more their contractility and electric sensibility will be diminished. These latter properties remain during the stage of atrophy, even for a year after the outbreak of the accident, and progressively return jointly with voluntary contractility; if they do not respond to electric excitation, it should be a sign of fatty substitution in the muscles. The affected limb experiences altogether a greater or less arrest in its development, and a diminution of temperature; the bones, arteries, and veins are less developed; and muscular equilibrium no longer being maintained, the limb assumes an abnormal direction, hence club-foot, distortions of the shoulders, trunk, pelvis, &c.

This sketch, where the most striking features of the disease are pointed out, shows that its distinctive character, its only peculiarity, is the fatty substitution in the muscles, occurring, as stated by Dr. Duchenne de Boulogne himself, at a more or less advanced period of the affection. The precursory fever and the cerebral accidents are far from being constant symptoms, neither do they exclusively belong to infantile atrophic fatty palsy, heretofore considered as a *paralysie essentielle* by French pathologists, and being, after all, the ultimate phase of *reflex paralysis*, so well described by Dr. Brown-Séquard. A peculiarity already remarked by Kennedy, West, Underwood, Rilliet, and other authors, is the local appearance usually exhibited by the disease, a fact which may be considered a rule with reflex paralysis. The state of the muscular properties, so carefully studied by Duchenne de Boulogne, exists likewise with other forms of reflex paralysis, without distinction whatever as to the age of the patient. I have observed muscular contractility and electric sensibility more or less impaired or entirely lost in long-standing cases of urinary or uterine paraplegia, in paralysis from gastro-intestinal affections, helminthiasis, teething, etc., etc., and, therefore, their disappearance cannot be considered as exclusive to the assumed new variety of paralysis. Just now, I am attending a lad, about seventeen years of age, who at the end of the winter was seized with muscular contractions in the neck while sleighing, and soon afterwards with a constant violent tremor in the left upper and lower extremities, until they became finally paralysed. When I first saw the patient, the 12th of June, he was very pale and emaciated, unable to walk without his left leg giving way, and being himself much fatigued. He was often giddy, and in cold perspiration; the sight was very weak, and the right pupil more dilated than the left, though sensitive to light. The neck was permanently flexed towards the right side; the left arm notably wasted; the muscles of the hand extremely atrophied, and the fingers, permanently flexed, could not at all obey the will. The shoulder was about a third the size of the other, and only the clavicular portion remained of the pectoral muscle. Atrophy was not so considerable in the leg, but movements were impeded in the toes, and when walking there was dragging of the limb, and involuntary flexion of the knee. There was no headache nor pain in any portion of the spine. The temperature was diminished in the paralysed limbs; the abdominal and thoracic organs were normal, though a very remarkable *bruit de souffle* existed in both carotids, and in the heart, certainly due to the anæmic condition of the patient. An extra-current of Ruhmkorff's machine, with rapid intermittence, was applied to test the muscular contractility and electric sensibility, which in the arm and forearm were but feebly manifest, even to a powerful current; in the hand there was no manifestation whatever of either of these phenomena. In the leg the muscles responded to a mild extra-current, and this first application of electricity caused a profuse perspiration in the patient, who was likewise quite giddy. From the above symptoms, I came at once to the conclusion that this was a case of reflex paralysis; strychnia and iodide of potassium jointly with the shower bath, and a generous diet, were prescribed; electricity continued nearly every day, for a period of ten or fifteen minutes, in the manner already described. After the second application of electricity the neck became contracted on the left side, and the pupils equally dilated; to the present date the improvement of the arm, hand, and leg is so great, the movement has so progressively returned in them, that I feel confident of the recovery of the patient. And here let me state that the return of muscular contractility and electric sensibility in the hand is quite subversive of the opinion of Duchenne de Boulogne, who is inclined to believe that when they do not respond to the electric current it is a proof of the existence of fatty substitution in the muscles. This case exhibits most of the symptoms described by Duchenne de Boulogne, as belonging to infantile atrophic fatty palsy; and had it not been for the above treatment, it is fair to presume that many of the muscles would have probably undergone a fatty substitution.

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* See De l'electrisation localisée et de son application à la pathologie et à la thérapeutique. 2d edit. Paris, 1861. p. 275.

Neither is it right to deduce, as Duchenne de Boulogne has done, from the analogy between spinal and infantile atrophic fatty palsy, that both are the result of a lesion of the spinal cord. Though the first may be attended with fatty substitution in the affected muscles, yet this alteration seems to be more a consequence of absence of the exercise of these muscles than of a morbid influence acting upon the nervous centres. Brown-Séquard has proved that nervous action is not necessary for nutrition, which likewise becomes altered in tissues remaining inactive for a long time. Therefore it should be in the impediment to circulation in the muscles that we must look for the cause of their fatty state, and so much so, that palsied limbs have a diminished temperature, the result of want of blood, and that no morbid alteration of the nervous centres has been detected in any instance of reflex paralysis on post-mortem examination. In evidence still of this opinion, I may add that electricity and the use of a warm douche, both means directly increasing circulation, prevent wasting of the limb; and also that numerous indeed are the cases of muscles, bones, and glands passing into a fatty state simply from their remaining in perpetual rest, and this, be it recollected, independent of any nervous agency. It is well known that when the functional activity of an organ is about to terminate, one of the ordinary phases through which the organ passes is fatty substitution. This is well illustrated in the placenta at the close of utero-gestation, when its function of nutrition is no longer necessary, and the same substitution will be observed in the thymus gland after birth. It does seem to me that there is a striking analogy between the positive termination of function in an organ and the temporary arrest of function in muscles, because of paralysis or any other morbid influence. I have myself had several opportunities of observing the vertebræ and muscles of the spine presenting all the stages of fatty substitution in cases of Pott's disease; I have detected the same alteration in the bones and muscles of a foot amputated by my eminent master, Professor Nélaton, after a *fungus articulorum*, and in the muscles of the forearm and hand of a child—both feet, together with the hands, being affected with congenital distortion—this child died of measles in the wards of my learned teacher, Dr. Bouvier, who made this case the subject of an interesting communication to the Chirurgical Society of Paris in February, 1860. I examined with the microscope the tissues of the limb; the fatty element not only replaced the muscles, but was also considerably increased in the bones of the hand—a peculiarity rare with children, whose bones contain very few fatty cells in their marrow.

It will be seen from what has been stated, that fatty substitution in the muscles is a consecutive alteration, observed during the advanced stage of permanent paralysis, not immediately depending upon a lesion of the spinal cord, and being principally the result of long inaction. Neither is fatty substitution in all the cases a necessary effect of the disease described by Duchenne de Boulogne; for it may attend likewise progressive atrophic fatty palsy, spinal paralysis, and any other affection of the locomotory apparatus, in which, notwithstanding the integrity of the nervous system, muscles are condemned to inaction. Therefore, *infantile atrophic fatty palsy* should not be considered as a distinct affection, nor removed from the class of reflex paralysis (*paralysies essentielles*) where it has been heretofore described, and in which affections, as in the others already mentioned, it is a frequent consecutive state.

4 W. 14th St., New York, July 5, 1861.

ELECTRICITY IN OBSTETRICS.*

By ANDREW H. SMITH, M.D.,

OF BRISTOL, PENN.

Recently, while studying the effects of Electricity upon the involuntary muscles, it occurred to me that it might be employed with advantage to excite contractions of the uterus in many cases in which ergot is used; and more especially for the purpose of combating hemorrhage arising from the absence of uterine contraction after delivery. In such a case, one pole of the battery could readily be introduced within the uterus, while the other is applied to various parts of the abdomen or to the sacrum, so that the current would be transmitted in every direction through the uterine wall. In this way the uterus could be subjected to the most powerful artificial muscular stimulant we possess; and inasmuch as the contraction of unstriped fibre thus excited, continues for a considerable time, there would be induced every condition demanded for an arrest of the hemorrhage.

Since the idea suggested itself to my mind I have not had a suitable case to test its value, and I send this in the hope that some one having a wider field for obstetric observation may be induced to make a trial of what would seem from theory and analogy likely to be of service in a class of cases in which the means generally employed so often prove ineffectual.

Berkshire Medical Society.—The Berkshire District of the Massachusetts Medical Society held its annual meeting at Lenox on Wednesday, June 26th, when the following officers were unanimously re-elected for the ensuing year; viz. President—Clarkson T. Collins, M.D., of West Barrington. Vice-President—Timothy Childs, M.D., of Pittsfield. Secretary—R. Cresson Stiles, M.D., of Pittsfield, Massachusetts. Treasurer—Abner M. Smith, M.D., of Pittsfield.

This society is now in a very flourishing condition. Its members are mostly residents of Berkshire Co., Mass.; but it includes many from the adjoining towns of other States bordering on that portion of Western Massachusetts, as Columbia Co., N.Y., and Vermont and Connecticut. It is composed of about seventy members. They hold their meetings the fourth Wednesday of each month, at different parts of the county, but mostly at the Medical College at Pittsfield. These monthly gatherings are not only of a highly interesting and instructive character in a scientific way, but are agreeably pleasant in a social manner, as on every occasion a dinner is furnished by some member. The July meeting is to be held in Great Barrington, where the Society will partake of the hospitality of its President.

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* Electricity has been frequently resorted to as a uterine stimulant, but medical opinion is unsettled as to its utility.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. A. B. MOTT.

TWO CASES OF TENOTOMY FOR THE RELIEF OF THE DEFORMITY CAUSED BY ANCHYLOSIS OF THE KNEE-JOINT.

[Reported by HENRY M. LYMAN, M.D., House Surgeon.]

CASE I.—*Wound of the Joint—Inflammation—Anchylosis—Contraction of the Flexor Muscles of the Thigh—Tenotomy—Recovery.*

During the month of December, 1859, Samuel S., a stout, healthy Irish boy, thirteen years of age, while breaking a piece of old lath across his right knee, inflicted upon himself, with a rusty nail that was sticking in the lath, a punctured wound near the upper border of the patella. The hemorrhage was slight, and there was no appearance of synovial fluid in the wound. The joint became much inflamed, and on the fifth day after the accident the patient was admitted at the New York Hospital. Fifty leeches were applied to the knee, and the limb was placed upon a double-inclined plane, where it remained for two months. During this time, extensive suppuration occurred about the joint, and incisions for the evacuation of pus were made over each condyle of the femur. When, at length, the purulent discharge had ceased, and the incisions had healed, the limb was removed from the inclined plane, but it was found that anchylosis of the joint had occurred. A popliteal splint of gutta percha was then applied, and the patient was allowed to walk with crutches. In the month of May, 1860, he was discharged from the hospital, but without any increase of mobility in the joint—the leg being permanently flexed in the position which it had occupied upon the inclined plane.

In August, 1860, the patient re-entered the hospital for the purpose of having his limb straightened. Ether was administered, the adhesions were broken up, and the patient was placed in the straight apparatus ordinarily used in fractures of the os femoris. At the end of three weeks the apparatus was removed, and the limb was rubbed vigorously every day. The flexors of the knee, however, renewed their contraction, and it soon became necessary to apply the popliteal splint of gutta percha. No further treatment was employed, and in November the patient was discharged with his limb in a position but little better than when he entered the hospital three months previously.

March 13, 1861.—The patient was admitted at Bellevue. The knee was free from pain and tenderness; the leg was flexed in such a way as to form with the thigh an angle but little greater than a right-angle, crippling the patient's gait to the last degree; the whole limb was well nourished, and in its growth appeared to keep pace with the growth of the opposite limb. The general health was excellent.

March 22.—The patient was etherized, and a careful examination of the joint was made by Dr. Mott. The patella was immovably adherent to the os femoris, and the amount of motion between the articular surfaces of the joint was scarcely appreciable. It was not thought possible to restore perfect mobility to the joint; but it was determined to attempt the relief of the existing deformity by division of the contracted tendons, which was accordingly done, on the 17th of March, by Dr. Mott. The tendons in the popliteal space were divided by sub-cutaneous section, the limb was placed upon a single-inclined plane, and extension was made with a 10 lb. weight attached to the foot.

The patient did not experience much pain; but on the third day after the operation the knee was so much swelled that eight leeches were applied over the joint, and the limb was tightly bandaged from the toes to the hip. The bandage was removed on the following day, and the redness and swelling were found to have nearly subsided. April 8.—Passive motion was commenced, but as the patella was firmly adherent to the inter-condyloid space, the movement of the joint was quite limited. April 15.—The knee was free from pain and swelling, and the limb was removed from the inclined plane. For a fortnight longer it was supported with pillows, and a weight was attached to the foot during the night-time. Passive motion was practised every other day, and every morning and evening the knee was rubbed with liniment. At the end of three weeks after the division of the tendons, the patient was allowed to get up, and to move about with the aid of crutches. The muscles of the limbs rapidly increased their strength, but the mobility of the joint did not improve as rapidly. Two months after the operation the patient was able to dispense with his crutches, supporting himself with a cane. The leg was then nearly straight, occupying the very best position that could be desired for a limb in which the motion of the knee was imperfect. The motions of the ankle were natural, and the sole of the foot rested easily upon the ground.

CASE II.—*Necrosis of Tibia—Contraction of the Flexor Tendons of the Thigh—Anchylosis of the Knee—Operation—Recovery.*

Edward F., æt. 34, native of Ireland, and a shoemaker by trade, was in the full enjoyment of excellent health till he was thirteen years of age, when, without any apparent cause, he was suddenly attacked with pain and swelling of the right leg, from the ankle to the knee. This resulted in necrosis of portions of the tibia, of which fragments were at different times removed from a point two inches below the inner tuberosity of the bone and from another point two inches above the inner malleolus. Early in the course of the disease, abscesses formed in the neighborhood of the knee-joint. It was two years before the limb was restored to a healthy condition. An attack of small-pox followed at the age of fifteen, but from that time till the date of his present admission to the hospital, the patient had not known a single day of confinement resulting from sickness. Such, however, was the impression produced by the pre-existent disease with which the leg had been affected, that the tendons by which the leg is flexed upon the thigh soon began to contract, and continued to contract gradually during the twenty subsequent years of his life. The patella became immovable, permitting very little motion of the knee. The muscles became atrophied, and the whole limb failed to keep pace with the growth of its fellow; so that at the age of thirty-four, it was only with difficulty that our patient, when standing erect, could touch the floor with the ball of the great-toe of his right foot.

It was on the 25th of February, 1861, while hobbling over the icy pavement, that this patient slipped and sprained the ankle of his unsound limb. The consequent pain and swelling were very great, and on the 1st of March he sought relief at the hospital, where he was placed in bed, and evaporating lotions were applied to the injured joint. At the end of a fortnight the swelling had disappeared, and it was decided, by division of the contracted tendons, to attempt the restoration of the limb to the straight position.

March 27.—The patient was etherized, and the tendons were divided by Dr. Mott, precisely as in the case above described. The tendo Achillis was also divided at the same time. The limb was then placed upon an inclined plane, and extension with a 15 lb. weight was made from the foot. This, however, occasioned such exquisite suffering, that the limb was removed from the plane for a few hours, and when restored to its place a smaller weight was attached to the foot. There was no swelling nor pain about the joint, and on the 8th of April passive motion was commenced. Five days later, the inclined plane was removed, and the patient was got upon crutches. His leg was absolutely straight, and when standing erect he could place both feet parallel and square upon the floor. Every day seemed to add to the length of the affected limb. Passive motion, friction, and the cold douche were regularly practised, and the improvement was gradual but certain. At this time (July 1) the two limbs appear to be of equal length; the motions of the affected knee are limited, but the ankle seems to be as perfect as its fellow. The patient walks easily with the assistance of a cane, but cannot yet rest the whole weight of his body upon the right foot without experiencing a slight sensation of pain in the foot and ankle. The limb is steadily gaining in strength and in size, and is already a serviceable and comely member of the body to which it belongs.

American Medical Times.

SATURDAY, JULY 13, 1861.

FEMALE NURSES IN MILITARY HOSPITALS.

Our readers are already aware in what light we regard female nurses. But our attention is again forcibly called to the subject by a letter which appears in another column, from an intelligent correspondent, a distinguished surgeon of the army, who expresses decided opinions against the present effort to introduce them into the public service. Believing that he represents a class of army surgeons who will not regard with favor the substitution of female for male nurses, in our military hospitals about to be opened, we take the occasion to call their attention to some of the more obvious reasons for this change, and the circumstances under which it should be made.

It is conceded that woman may be employed "as the regular administrator of the prescribed medicines," and that she is more capable than the opposite sex of those "delicate, soothing attentions which are always so grateful to the sick." This has already been proved in the hospitals. At Cairo, Ill., where Mrs. Yates and her well trained nurses are winning the good opinions of the very physicians who at first opposed their admission, says an observer:—"The presence of these ladies has demonstrated that there are numberless little things essential to the comfort of the sick, which not one man in a thousand ever thinks of, but which woman sees by intuition, and supplies as if by magic."

We doubt not it will also be admitted that she is better adapted than man to prepare food for the sick, to preserve cleanliness of the wounds, and of the beds, and to regulate and keep in order whatever relates to the domestic appointments of a hospital. Miss Nightingale has aptly said on this point:—"I think the Anglo-Saxon would be very sorry to turn women out of his own house, or out of civil hospitals, hotels, institutions of all kinds, and substitute men housekeepers and men matrons. The contrast between even naval hospitals, where there are female nurses, and military hospitals where there are none, is most striking, in point of order and cleanliness." There can be few who will not agree with her in the opinion, that "the woman is superior in skill to the man in all points of sanitary domestic economy, and more particularly in cleanliness and tidiness;" and further, that "great sanitary, civil reformers will always tell us that they look to the woman to carry out practically their sanitary reforms."

What then are the objections to the employment of female nurses in military hospitals? Our correspondent has stated several, but they are more imaginary than real. We are not aware what plan will be adopted in our new military hospitals, nor what special duties will be assigned to female nurses, if they are employed; but we know from personal experience, that he has assumed the existence of difficulties which will never occur in a hospital that has a proper organization. Let us recur to this experience, as showing that female nurses are already successfully substituted in certain general civil hospitals in this country, and by inference that the system may be extended to the military hospitals soon to be organized.

It was our fortune to spend a portion of our medical pupilage as resident in a hospital which was entirely under the supervision of females. This hospital was general in its character, admitting all classes of patients, medical and surgical, and of both sexes. During this period cholera prevailed in the town, and the sick of this disease crowded the wards. The general management was under the direction of a matron who had for years been an experienced hospital nurse. Subordinate to her were six chief nurses. These nurses were educated, intelligent, and refined, and many of them were from the highest ranks of society. They were skilled nurses. They adopted this employment from strong religious convictions of duty, and, entering upon it as a life-work, submitted to thorough preparation by systematic training. The division of labor was as follows:—one had entire charge of the culinary department, a second of the laundry, and the remaining four of the several medical and surgical divisions of the wards. Under their immediate supervision, therefore, was the preparation of the diet, the washing of the clothes and bedding of patients, the administration of medicines, and all minor dressings. There was also the usual number of visiting physicians and surgeons, and a resident medical student. Although there was but a single male, there was always ample assistance to be obtained among the convalescents. The administration of the medicines was never committed to assistants, nor, indeed, any of the details of nursing. Surgical dressings of a delicate character were, of course, under the immediate charge of the Resident Physician, and the assistance of male patients from their beds was the proper duty of the orderly. During a residence of a year in this institution we never knew the slightest indecencies on the part of male patients towards their nurses, nor were the latter ever placed in a position embarrassing to one accustomed to the daily duties of hospital wards. On the contrary, the patients entertained the most profound respect for the nurses, the convalescents volunteering with the utmost alacrity to aid them in their duties. In regard to that hospital we speak but the unanimous sentiment of every physician and surgeon connected with it when we affirm that in cleanliness of wards and beds, in the preparation of the food for the sick, in the precise administration of medicines, in watchful care at the bedside, in a word, in everything pertaining to the management of the domestic and medical department of a hospital, this was a model institution, and one which has no equal in this country. And if we add to these excellencies, the thousand little offices of kindness which woman alone knows how to bestow upon the sick and suffering, we need not be surprised that many a patient from that hospital was heard in after years to utter a benediction upon his former nurses, the good Sisters of Charity!

The testimony of those who have seen the practical working of the system of female nursing is of the same purport; and as such evidence is that upon which we must rely in coming to a rational conclusion, we shall refer briefly to the opinions of those who have had opportunities for extended observation.

At Guy's Hospital, London, there were *no male nurses* in 1857, according to the evidence of Mr. Steele, its Superintendent. There were eighteen chief nurses, having charge of the day and night nurses; of the former there were twenty-seven, and of the latter twenty-three. The duties of the chief nurses are thus stated:—"They have the general superintendence of the wards, and they are responsible to the physicians for the medicines and wines, and for the cleanliness of the patients; they have charge of the ward furniture and the bed-linen." The other nurses had the immediate charge of the patients. In reply to the question, Does your system of nursing work well? he answered:—"Remarkably well." The only improvement suggested was the employment of one or two orderlies for the venereal, and bad surgical cases. The same system was in operation in London Hospital.

After an extended investigation of the working of the hospital systems on the continent, **Mr. Alexander** gave evidence before a Parliamentary Commission as follows: "From what we saw and heard of the female nursing in Paris and Brussels, there cannot be a doubt that good results would follow the introduction of a certain number of well-selected educated nurses to our hospital establishments. In Jamaica, in 1837, I recommended female nursing to be employed, from what I saw of the evil effects, and even risk of life, by orderly or soldier nursing in severe cases, but no attention was paid then to my recommendation; and from my more extended experience, I am still more convinced of the advantages that would be derived from the judicious introduction of female nursing into our permanent hospital establishments."

It appears also that, at the time this investigation was made, the French emperor was forming a corps of female nurses for military hospitals, the selection being made from the Sisters of Charity in the civil hospitals.

During the Crimean war female nursing in Military Hospitals was put to a practical test, and the opinions of those who witnessed its efficiency are worthy of especial consideration. **Dr. Parkes**, who had charge of the Renkioi Hospital, says: "I have a very high opinion of female nurses, if they have been trained and are proper nurses." **Mr. Meyer**, Medical Director of the Civil Hospital at Smyrna, states that "they worked uncommonly well; out of twenty-two female nurses only one was removed for any misconduct. . . . . Several of the ladies that we had did the work uncommonly well, and it would have been very difficult to have got a larger class of severe cases of fever attended to so well by night and day except by the agency of those ladies, who were thoroughly to be relied on, not only from their superior intelligence but their devotion to the work."

But we need not multiply this evidence, for happily our Government and the intelligent Chief of the Medical Bureau require no further arguments or evidence to prove the importance of employing qualified female nurses in the military hospitals. This question has already been settled by the Surgeon-General, and the good fruits of the new system are beginning to be manifest at Cairo and Fortress Monroe. And it is still more gratifying to learn that this question is about to receive the sanction of the Legislature. The bill introduced into the Senate by Senator Wilson, for the "better Organization of the Military Establishment," provides for the substitution of female nurses in military hospitals, with pay and rations.

We can cite no more convincing proof of the flexibility of a free Government and its power of adapting itself to unforeseen emergencies, above that of monarchies, than this spontaneous adoption of great public measures which simply commend themselves to good sense and a sound judgment.

THE WEEK.

A **Correspondent** of the *London Lancet*, writing from Paris, thus exonerates the physicians of Count Cavour from the charge of malpractice:—

"The above mention of venesection and its abuses reminds me of a subject on which I believe a somewhat false impression to exist at present in England—namely, the extent to which bleeding is practised in Italy. Count Cavour was bled seven times, it is said, and he sank: *he was bled, no doubt, to death.* Setting aside the point of propriety or malapraxis—a question, by the way, not easy to decide—it is probable that in all those six or seven bleedings the whole quantity of blood lost did not amount to thirty ounces: a supposition rendered all the more likely by the fact that the illustrious statesman, in accordance with *the old Italian custom*, was in the habit of being let blood on certain occasions. Now, by the old Italian custom, as still practised in the southern districts of the Peninsula, is not implied a heroic abstraction of sixteen, twenty, or an indefinite number of ounces of the vital fluid, 'usque ad deliquium,' with instructions for repetition 'ad libitum.' An average bleeding at the hand of the 'salassatore,' or licensed Italian phlebotomist, is a quantity varying from *three to four* ounces—an habitual bleeder (in the passive sense) would rarely pass the latter quantity; and Count Cavour, as has been publicly stated, was, to within a very few hours of his death, *his own physician*, dictating the treatment he wished to undergo to a young practitioner, who blindly followed the injunctions given. All those of your readers who have witnessed the fatal rapidity of the 'perniciosa' fever will readily understand that in the nature of the disease itself may be found ample explanation as to the cause of death without recourse being had to the alleged exhaustion by bleeding. I am anxious, as you see, to exonerate young Italy from the imputation of parricide."

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Every obstetric physician experiences the want of skilled monthly nurses. In general any superannuated widow, unable to live by other means, obtains the names of several physicians as references, and issues her cards as a qualified nurse. She enters upon her profession with no practical knowledge of her duties, or just conception of her relations to the patient and medical attendant. Her head is full of old women's remedies, with which she is constantly annoying the physician, or in his absence administering to the patient; she is foreboding if the labor is tedious, and horror-stricken if it is complicated, and requires operative interference; in short, instead of being an assistant to the accoucheur, and a source of comfort and support to the patient, she proves to be a constant annoyance to the former, and an alarmist of the latter.

What we need is, a school for the practical training of monthly nurses. In a recent number of the *London Lancet* we find the following remarks upon this subject, which we commend to the attention of the profession:—

"Dr. Lory Marsh, of Nottingham, has so far successfully called attention to the deficiency of skilled childbed nurses as to have evoked an organization for applying a remedy. His views have been supported, we are informed, by the great majority of his local brethren, and are actively taken up by a committee of ladies. Now, since practical instruction seems to require some special institution for the reception of lying-in women, it is proposed that in every town an institution, having this object in view, should be established; and that nurses should in them acquire the skill they will be called upon to exercise. In large towns there can, unhappily, be no doubt there will rarely lack a sufficient number of poor women needing charitable succor in their travail to furnish an hospital or maternity charity. In small towns this may not always be the case. But we do not think it will ever be necessary to collect these poor women together into one building. The experience of the Royal Maternity Charity of London, which annually delivers at their own homes 3500 women, is ample proof that no insurmountable difficulty exists in administering efficient medical assistance to parturient women in isolated dwellings. If, for the sake of facility of administration, it should ever be found desirable to give some degree of local concentration to a maternity charity, nothing is more feasible than to found an institution on the system of cottage-hospitals. This system lends itself with the most admirable convenience to the requirements of a lying-in institution. A cottage may accommodate two or three women in separate rooms. According to the demand, another and additional cottages may be taken. These should be employed in rotation, each being kept empty for a fortnight, to allow of purification by scrubbing, lime-washing, and aëration. This arrangement would afford ample means of instructing nurses—none the worse for the greater similarity of the conditions to those of a private dwelling. Each patient might be at liberty to select any medical practitioner in the town of those willing to act, to superintend her case. Periodical lectures and demonstrations might be given; and some form of certificate or diploma of competency might be awarded to the nurses who had undergone a sufficient training. In many places it would hardly be necessary to have special institutions at all."

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The military spirit is working an important reform in the summer clothing of our juvenile citizens. The Zouave dress is just now the popular style with boys, regiments of whom are seen, giving a fantastic appearance by their various colors and uniforms, to the parks and places of resort. As a summer suit for boys the Zouave cut is a decided improvement, the only objectionable part of the rig being the small, tight-fitting skull cap without a peak. The sudden exposure to the strong sunlight will prove injurious to eyes accustomed to the shade.

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Ambulances are of nearly as much importance to our regiments in time of action, as arms. It is to be regretted that so little has yet been done to supply these necessities. If ample provision of this kind is not made before actual hostilities commence, the sufferings of the wounded will be increased tenfold. Indeed, the surgeons of the regiments engaged at Bethel report that they were in the greatest need of ambulances to transport the wounded. The authorities of several of the States have, with commendable foresight, provided means for transporting the wounded.

The following extract from the *Albany Journal* explains the action of the Governor of this State:—The subject early occupied the attention of the Governor, and direct inquiries were addressed to the agents of the General Government, how far the State authorities would be permitted to act in the matter. He was informed that the General Government desired to make *entire provision;* that they were better able to judge what was actually required, and could better concentrate them at points where they were needed, often avoiding useless encumbrance and delay. While there is much force in these reasons, yet when we consider the great rapidity with which the large army has been brought together, it is to be feared the General Government may not in every instance be prepared to supply them promptly, and that it would have been better, even at the risk of encountering the above objections, to have left their provision to the State authorities. Some thirty regiments from this state are now in the field. There has thus far been no active service, consequently no need either of ambulances or baggage wagons; but whenever our troops are ordered forward, both would become a necessity. Steps will, we learn, be taken to provide them, without relying upon the General Government to furnish them.

Reviews.

Biographical Sketches of the Deceased Physicians of Westchester County, N. Y., being the Annual Address before the Westchester County Medical Society, at its session held in White Plains, June 1, 1858. By George J. Fisher, A.M., M.D., President of the Society. Published by order of the Society. New York, 1861.

In this publication, Dr. Fisher has done a grateful service, not only for the profession of the county in which he resides, but to the medical profession at large. In this effort he has furnished an example that we earnestly commend to those County Medical Societies which have not already undertaken the work. We are aware that such historical sketches have been made in some counties, but in the greater number the interesting details of the histories of the pioneers in our profession are rapidly gliding away with the passing generation, never to be recalled. In the matter of medical history and biography we are extremely culpably negligent. There ought to be societies in every State devoted to the collection and preservation of the chronicles of our profession.

In his introduction Dr. Fisher alluded to those who have preceded him in this work in other counties, but he omits to mention the very complete and interesting sketch of the Medical Men of Cortland County, by the Hon. G. W. Bradford, M.D., of Homer.

The address of Dr. Fisher contains biographical notices, more or less complete, of thirty-three of the former physicians of Westchester county. Among them we notice the names of some who have adorned the profession of the State.

Lives of Eminent American Physicians and Surgeons of the Nineteenth Century. Edited by Samuel D. Gross, M.D., etc. Lindsay & Blakiston, Philadelphia.

This is a book which strongly commends itself to the notice of the profession. It contains biographies of more than thirty physicians, who flourished at the beginning of the nineteenth century, all known to fame, and most of them pleasantly remembered by the present generation of physicians as accomplished teachers in medical science. The plan pursued by Dr. Gross in getting up the work appears to be judicious. He enlisted among his contributors those who were most competent, by acquaintance and sometimes by relationship, to give a correct portrayal of character and statement of facts; so that there are almost as many writers as biographies. There is therefore diversity of style in the book, and more comprehensive biographical sketches than we could expect from the pen of one man. The writers are among the most eminent physicians of this country, furnishing an array of names which would not compare unfavorably with those of whom they write.

The memoirs of medical men, confined strictly to a consideration of their professional views and actions, must of necessity be dry and uninteresting to the lay reader. This objection was wisely foreseen by the editor, who has obtained from his contributors to the volume portrayals of the social and general as well as professional characteristics of those of whom they write. Among the many eminent men whose lives are given in this book are Benjamin Rush, Samuel L. Mitchell, David Hosack, Philip Sydney Physick, David Drake, Nathaniel Chapman, and Wm. E. Horner.

The book is an octavo of more than eight hundred pages, of excellent paper and typographical execution.

Medical Communications, with the Proceedings of the Sixty-Ninth Annual Convention of the Connecticut Medical Society, held at New Haven, May 22d and 23d, 1861. Hartford, 1861.

The publications of this Society are assuming a more permanent form. This is the second number of the first volume, paged to be bound with the preceding. The first article of the number (third of the volume) is the Annual Address by Dr. Woodward, of Franklin, on *Life*. It is a classical production, and though of a somewhat speculative character, it is characterized by practical suggestions and philosophical deductions. The next article is on *Hereditary Predisposition*, by Dr. J. B. Lewis, of Rockville. This was the annual dissertation before the Convention. The author gives a brief historical sketch of the views of writers, and then proceeds to point out the evidences of hereditary transmission of physical peculiarities. The examples are abundant, and are by no means exhausted by the writer. The essay is clearly written, and exhibits much study and reflection. The last article is a Sanitary Report of the County of Hartford for 1860, by Dr. L. S. Wilcox. The author draws the conclusion from the tables of births and deaths, that females have a much lower degree of viability between the ages of five and forty-five than males. The average ratio of mortality of the former under five years to the latter is 100 to 116.8; and from this age to forty-five the proportion of females to males increases. The results of Dr. Wilcox's calculations are important, and should be verified by a large range of statistics. The remainder of the volume is occupied with biographical sketches of deceased members, among which is that of Prof. Wm. Tully.

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

Prepared by E. H. Janes, M.D.

Large Doses of Ipecacuanha in the Treatment of Dysentery.—A large portion of the medical reader's time is spent in the investigation of new theories, the application of new remedies, or some new application of old ones in the various and fluctuating methods of treating disease. One remedy rapidly acquires a high reputation in the treatment of certain diseases which it engages for a longer or shorter period, and then gradually falls into disrepute, to be at some future time revived to a somewhat modified degree of popularity, until, after successive periods of triumph and abandonment, it finally settles at its proper level in the scale of therapeutical value. The treatment of dysentery by large doses of ipecacuanha is not of recent date. It is well known that Piso introduced this article into the European Materia Medica as the *radix anti-dysenterica;* and that Helvetius long employed it as a secret remedy for the same disease, until a sense of duty in the shape of 1000 louis-d'ors induced him to give to the world the benefit of its publication. The mode of its administration was in drachm doses in the form of infusion; but it gradually changed, a large dose being given in the early stage as an emetic, followed by small doses in combination with rhubarb, opium, bark, etc. About the year 1804, the mercurials began to be common in the treatment of dysentery, and calomel and opium gradually took the place of ipecacuanha, which fell into disuse. Efforts were made to revive its original use at different times, until 1858, when Surgeon E. J. Docker, H. M.'s Seventh Fusileers, published in the *Lancet* the result of his experience during six years in the island of Mauritius, where his regiment was stationed; dysentery of a severe and fatal type frequently prevailing, affording him ample opportunities of testing the value of this, compared with other modes of treatment. His method of administering it was, first, to apply a sinapism to the epigastrium, and administer a draught containing one drachm of the tincture of opium, half an hour after which he administered from thirty to ninety grains of the powder in the form of bolus or draught. Under this treatment he lost only one out of fifty-three cases treated. The details of Mr. Docker's cases attracted considerable attention amongst the medical officers in India; and William Robert Cornish, Esq., staff-assistant surgeon, etc., has recently published in the *Madras Quarterly Journal of Medical Science*, a lengthy article on the subject, embracing the official reports from thirty-four medical officers of H. M.'s British and Indian medical services, with the cases of 297 Europeans, and 218 natives, treated at the several stations.

The success of this treatment was most marked in Europeans suffering from acute uncomplicated dysentery, the rate of fatality being only 1.3 per cent., whereas under the ordinary treatment for the previous seventeen years it had averaged the rate of 7.1 per cent. In the 44th regiment, which arrived in India at the end of the year 1857, there were in the years 1858–9 104 admissions from dysentery, 68 of whom were treated in the ordinary way, with a mortality of 8.8 per cent. The remaining 36, with 23 occurring the following year, were treated with large doses of ipecacuanha, and all recovered. The treatment was not so successful among the natives, which is in a measure accounted for from the fact that many of the cases reported were convicts in jail, as well as Sepoys, many of the former, being invariably of an asthenic character, proving fatal. The rate of mortality among the natives under this treatment was 3.6 per cent. The mode of administering the remedy was not uniform, for while some invariably prepared the stomach for retaining it, by a sinapism to the epigastrium, and administering a large dose of laudanum a short time previous to the powder, others gave it without any such preparation, deeming the vomiting rather beneficial than otherwise. Surgeon Arthur in his report says: "It will be admitted that, in large doses, ipecacuanha acts as an emetic, laxative, and sudorific, and also that it produces a powerful impression on the organic system of nerves, and through that system on the vascular system. It thus exerts a powerfully derivative action on the larger intestines. During its emetic operation, while the system is overpowered by sickness, the cutaneous system relaxed, the blood driven from the internal parts to the surface, the force of the vascular system lowered through the influence of the organic system of nerves, and the inflamed or ulcerated mucous membrane relieved from the contact of irritating fæcal matters and morbid secretions by the laxative operation of the remedy, the congested condition of the large intestines is diminished, and by successive repetitions of their combined actions, a powerful and permanent impression is made on the disease. All these effects bear directly or indirectly upon the diseased intestine, and I am convinced that the efficacy of ipecacuanha in the cure of dysentery depends on them as a whole, and not upon nausea alone, nor upon its diaphoretic effects or purgative effects alone." From a careful examination of these reports, emanating from so many different sources, there seems to be a good amount of evidence in favor of the conclusion that ipecacuanha is a valuable remedy in acute uncomplicated dysentery, if given boldly and continued at proper intervals until fæcal evacuations appear, when the cure is completed by other means. In the mean time, however, the usual auxiliaries should not be neglected. The usual dose is from ʒ ss. to ʒ j. repeated every four or five hours during the day, until the severe symptoms are relieved, which in recent cases was, according to report, in one or two days. Some of the cases reported were treated after other measures had failed, and, though requiring a longer time, ultimately yielded to the treatment. While submitting the claims of this remedy to the attention of the profession, we are not yet prepared to regard it as a sovereign remedy, adapted alike to all cases and all stages of the disease. We are well aware of the powerfully depressing effect it produces on some constitutions, of the asthenic character the disease often assumes from the commencement, especially when connected with a depraved condition of the blood, from a long course of semi-starvation, overcrowding, and deficient ventilation; of the rapid progress the disease has often made before coming under treatment; in all of which cases the remedy requires judicious management, and its operations to be carefully watched. As we are promised a further report on the subject, we shall watch with interest its progress, trusting that experience carefully noted, and unbiassed by prejudice, will eventually develop whatever is valuable, and at the same time limit its claims to confidence within proper bounds.

Reports of Societies.

ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF SOUTHERN CENTRAL NEW YORK.

The fifteenth annual meeting of the Association was held at Owego, Tioga county, on the 25th and 26th ult.; **Dr. Nelson Nivison**, of Schuyler county, in the Chair. **Drs. Charles Laning, Franklin B. Kimball**, and **E. P. Allen**, became members of the Association.

The President delivered an appropriate opening address, calling the attention of the Association to various important matters connected with its future prosperity and the welfare of our profession. The minutes of the last meeting were read by the Secretary, Dr. Orton, and approved.

Dr. L. H. Allen, of Owego, offered the following resolutions, which were unanimously adopted.

Resolved, That the members of the Medical Association of Southern Central New York, regard the rebellion of the Slave-holding Confederacy with deep abhorrence; and the principal actors therein as traitors to a wholesome and beneficent government.

Resolved, That our Government, constitutionally administered, shall at all times receive our cordial and united support.

Dr. Ivison, from the Committee appointed to draft resolutions relative to the death of Members, offered the following.

Resolved, That this Association has learned with feelings of deep regret the loss of Dr. J. H, Mead, of Tompkins county, and that in his death the Medical profession, and particularly this Association, has lost a devoted friend and valued member.

Resolved, That the deceased, for honesty, integrity, and devotion to his profession, has left an example worthy of imitation, and that we hereby offer to his bereaved family our kindest expressions of sympathy, condolence, and regard.

Resolved, That the Secretary be requested to forward a copy of these resolutions to the friends of the deceased.

Dr. A. Willard, of Chenango county, Chairman of the Committee on so much of the President's introductory address as related to Medical and Surgical appointments in the Army, reported as follows:—

The course heretofore pursued in the appointment of Surgeon and Surgeon's mate, in the Militia of this State, has been far too often in the exercise of connivance or favor, and as often with little or no regard to capacity and fitness for the position.

Such a course, in the opinion of your Committee, even in times of peace, is most reprehensible and objectionable, and would, if continued in a time of war, render that branch of the service nugatory and disgraceful. But we are happy to know that since our country has become involved in the present lamentable conflict, a different course has been adopted, so far at least as the State of New York is concerned.

The Surgeon-General has appointed a Committee of Medical men of the first standing in the country, and acknowledged talent, by whom every man holding the position of Surgeon or Surgeon's mate, as well as every applicant for it, is thoroughly examined with reference to the naked question of *qualification*.

Your Committee beg leave, therefore, to offer the following:—

Resolved, That the responsibility of the appointment of Surgeons in the Army has been confided to hands every way worthy of our respect and confidence, and that they have our unreserved approval and support.

The resolution was unanimously adopted.

Adjourned to meet at 8 o'clock P.M.

EVENING SESSION.

The Vice-President, **Dr. Arnold**, having called the Association to order, the President delivered his Annual Address, subject—Medical Progress.

On motion of **Dr. French** a vote of thanks was tendered the President for his interesting, instructive, and valuable address, and that he be requested to furnish a copy for publication.

SECOND DAY SESSION—*June 26.*

The Association assembled at 8 A.M., and proceeded to the regular order of business, namely, the Reports from Standing Committees.

Dr. Eastman reported on the Surgery of the County of Tioga, and Dr. Daniels continued the same for the same county.

Dr. A. Willard presented several interesting cases occurring in surgical practice in the county of Chenango, reported by Dr. Baker, of Norwich, consisting of operations for cancer of the breast; cancer of the lip; caries of the ankle-joint, hydrocele, hare-lip, etc. Also, an operation for strangulated femoral hernia in the male, successfully performed by Dr. Willard, was noticed.

Dr. Holmes reported on the Surgery of Bradford county, Pa.

Dr. J. G. Orton, Chairman of the Committee on Endemics, Epidemics, and Pathology, for the county of Broome, made a Statistical report of 756 cases of disease occurring in his own practice during the past year, and offered remarks on the more prevalent of the zymotic diseases. The rate of mortality was 1 to every 188 cases treated.

Dr. Allen, of Owego, reported on Obstetrics for the county of Tioga, and **Dr. P. G. Cady**, of the same county, presented an interesting case of puerperal peritonitis treated very successfully by opium.

Dr. Holmes offered a report on Obstetrics for the county of Bradford, Pa.

AFTERNOON SESSION.

At 2 o'clock the Association proceeded to the election of Officers for the ensuing year, which resulted as follows:

President,	Dr. Caleb Green, of Cortland county.
1st Vice,	Dr. Daniel Holmes, of Bradford "
2d "	Dr. G. P. Cady, of Tioga "
Rec. Secretary,	Dr. J. G. Orton, of Broome "
Assist. "	Dr. Charles Laning, of Tioga "
Corresp. "	Dr. L. H. Allen, of Tioga "
Treasurer,	Dr. E. G. Crafts, of Broome "

Committee of Publication, **Drs. Orton, Crafts**, and **Green**.

Delegates to American Medical Association were continued the same as last year, with the change of **Dr. Tappan** for **Dr. Tinkham**, removed, and **Dr. E. H. Eldridge** for **Dr. Mead**, deceased.

Dr. Daniel Holmes, Delegate to the New York State Medical Society.

The reading of cases occurring in the practice of members of the Association during the past year, being in order, **Dr. John Tappan**, of Newark Valley, Tioga county, presented a case of great interest and peculiarity, of suspended action of the functions of the bowels and kidneys, for a period of many months. It was referred to the Committee of publication.

Dr. J. G. Orton, of Binghampton, Broome county, read extracts from a letter received from **Dr. H. S. West**, an Honorary Member of the Association, now resident missionary physician at Livas, Syria: exhibiting a report of his surgical practice during the past year, consisting of fourteen operations for lithotomy, of which only two proved fatal; two operations for strangulated hernia, both recovering; operations for cataract, amputations, etc., etc., all of much interest. They were referred to the Committee of Publication.

Dr. Daniel Holmes read an Essay on Diphtheria, which was also referred to the Committee of Publication.

On motion of **Dr. Arnold**, the Association adjourned to meet at Homer, Cortland county, on the last Tuesday of June next.

Correspondence.

DUTIES OF THE ARMY SURGEON.—FEMALES NOT SUITABLE FOR NURSES.

[To the Editor of the American Medical Times.]

Sir:—It is not enough for the surgeon merely to attend to cases of illness when called upon. He should keep an eye to the clothing, bedding, cleanliness, and food of the men. He should keep a general supervision over their sanitary condition; and this, with *proper tact*, can be done without interference with the duties of the "line" officers, or setting in antagonism the *jealousy of command* among them.

Medical officers are not compelled to attend the civil employés of the army, such as quarter-masters' men, &c., but cases frequently arise when such services ought to be cheerfully rendered.

The subject of the diet of soldiers requires the grave, united, and prompt action of all the medical men of the country. The disgraceful frequency of scurvy in the United States Army, lately commented upon in the editorials of the Medical Times, is a subject of national importance. Such a state of things should not exist.

Our women appear to have become almost wild on the subject of hospital nursing. We honor them for their sympathy and humanity. Nevertheless, a man who has had experience with women nurses among male surgical cases, cannot shut his eyes to the fact that they, with the best intentions in the world, are frequently a useless annoyance. Cases are continually occurring in male surgical wards of such a character as require strong arms, and attentions which any reasonable medical man is loth to exact from female nurses. Imagine a delicate refined woman assisting a rough soldier to the close-stool, or supplying him with a bed-pan, or adjusting the knots on a T-bandage employed in retaining a catheter in position, or a dozen offices of a like character which one would hesitate long before asking a female nurse to perform, but which are frequently and continually necessary in a military hospital. Besides this, women, as a rule, have not the physical strength necessary. For example: a man having gunshot wounds of grave severity affecting the lower extremities, with perhaps incontinence of urine, or diarrhœa, would not improbably be attacked with bed-sores if not kept scrupulously clean. Should the soft parts of the back begin to ulcerate, local attention becomes doubly necessary. The patient, under these circumstances, requires often to be lifted up carefully, and bodily, so as not to alter the comparative position of his limbs to the body. To do this properly, at least *four* strong men are required, who, stationed two at the shoulders and two at the hips (one hand from each lower assistant steadying the thigh and leg of that side), can thus raise the man steadily and carefully. A fifth would not be out of place in supporting the feet, while the medical attendant washes the excoriated parts, applies the needed dressings, and throws upon the surface of the bed a clean sheet.

Women, in our humble opinion, are utterly and decidedly unfit for such service. They can be used, however, as the regular administrators of the prescribed medicines, and in delicate, soothing attentions which are always so grateful to the sick, and which at the same time none know so well how to give, as do noble, sensible, tender-hearted women.

But as hospital nurses for wounded men, they are by nature, education, and strength totally unfitted, i. e. when we consider *all the duties* surgical nurses are called upon to perform. In conclusion, it may be well to state that a surgeon on duty with troops, by showing proper interest in the men, without allowing himself to be humbugged by them, will gain their affection as well as respect. S.G.

Army Medical Intelligence.

APPOINTMENTS.

Ohio Regiments.—18th, Surgeon's Mate, T. Sikol. 22d, Surgeon's Mate, Julius Schenck. 23d, Surgeon, M. M. Stimmel; Assistant Surgeon, John McCurdy. 24th, Surgeon, David Welsh; Assistant Surgeon, Enoch Pearce. 25th, Surgeon, L. G. Meyer; Assistant Surgeon, G. R. Weeks. 26th, Surgeon, W. Clendennin; Assistant Surgeons, Andrew Sabine and Norman Gay.

New Jersey Regiments.—1st Regiment, Surgeon, Taylor; Assistant Surgeon, Gordon. 2d Regiment, Surgeon, Grant; Assistant Surgeon, Oakley.

Illinois Regiments.—1st Congressional District, Surgeon, W. J. McKim; Assistant Surgeon, H. A. Buck. Fifth District, Surgeon, T. Jourdan; Assistant Surgeon, W. H. Giltrens. 3d District, Surgeon, Christopher Goodbrake, of Clinton; Assistant Surgeon, F. K. Bailey. 2d District, Dr. Plummer. 1st Regiment, Surgeon, A. W. Heise; Assistant Surgeon, E. A. Goodwin. 12th Regiment, Surgeon, H. Wardner; Assistant Surgeon, H. Farris. 8th Regiment, Surgeon, Silas F. Trowbridge; Assistant Surgeon, J. M. Phipps. 9th Regiment, Surgeon, Sanford Bell; Assistant Surgeon, D. Hamilton.

Michigan Regiments.—3d Regiment, Surgeon, D. W. Bliss; Assistant Surgeon, Z. E. Bliss.

Rhode Island Regiments.—Second Regiment, Surgeon, Francis L. Wheaton.

Maine Regiments.—Fourth Regiment, Surgeon, W. A. Banks. Fifth Regiment, E. G. Bunston; Assistant Surgeon, Francis G. Warren.

New York Regiments.—Twentieth Regiment, Surgeon, Daniel Fisk.

Sanitary Inspection.—Rev. Dr. Bellows of New York, President of the Sanitary Commission, recently visited the hospitals at Cairo, assisted by Drs. Mussey and Newman. They subsequently visited the arsenal, barracks, and military hospital at St. Louis, and found them in good condition, with the exception of the Hospital.

Hospital at Cairo.—The principal hospital is under the charge of Drs. Sims and Haven, of Chicago. There were two hundred cases of sickness on the 1st inst. Dr. J. Simons, U.S. A., has been appointed Medical Director of the Department.

Military Hospital, Cincinnati.—This institution is supported by private subscription. It receives the sick from Camp Dennison. Up to the 1st of July it had received forty-one patients.

Camp of Instruction, Michigan.—Considerable sickness prevails among the troops at this encampment, and a hospital has been established, which is in charge of Dr. Everett.

Quarantine Physician of St. Louis, Mo.—Dr. Powers, Quarantine Physician at this port, has resigned his position, and entered the 7th Regiment of Missouri Volunteers.

Surgeon of the Monticello.—Dr. Heber Smith, surgeon of the gunboat Monticello, who was wounded in the face at the affair on the Rappahannock, has returned home on leave of absence. The ball entered the left cheek, and traversing the teeth of the upper jaw, escaped from the mouth, destroying several teeth, wounding the tongue, and dividing the upper lip slightly. The wounds have all healed except that in the cheek, leaving but slight cicatrices.

Hospital of the Rhode Island Regiment.—A correspondent of the *Providence Journal*, writing from Camp

Sprague, June 28, says:—In common with every other thing belonging to the Rhode Island regiment, our hospital arrangements are deserving admiration. The same careful foresight that has placed every other department high in the consideration of the public, has not omitted to give an equal excellence to that branch of the service which has for its office the tender care and kindly treatment of all who, by disease or in the discharge of their duty, have been rendered helpless to perform their part in the great drama of the day. . . . It is a gratifying fact to us, and to our accomplished medical staff, to know that whilst the hospitals of other regiments in this vicinity are averaging eighty cases each, we have only twenty-five undergoing treatment, and of those the majority are confined with summer complaints.

"**Asphyxia Nigrum.**"—A surgeon to one of the regiments at Fortress Monroe has give the above name to secession, which he considers a species of insanity. He is reported to have said that "wherever the negro odor prevails, there is secession. In the mountainous regions, where the carbonic poison exhaled from the negro is not prevalent, you find union men. Look at Eastern Tennessee, Western Virginia, Eastern and Northern Kentucky, there you find only isolated cases of the asphyxia nigrum. A majority of the people, like those who are enabled to hold their heads above the choke-damp in a well, retain their faculties. The Southern atmosphere is charged with it. The burning of gunpowder is the only thing that will cure it."

Competent Cooks Needed.—Surgeon Pease of the 12th Regiment, N. Y. Volunteers, writes to the *Syracuse Journal:* "There is a matter that ought to be brought to the attention of the authorities, and pressed upon them, until action is taken that shall secure the object sought. It is this—the providing an intelligent and competent cook for each company. There is nothing our men so much fail in, as in cooking their food, and there is hardly anything that so much affects their health and efficiency. Frederick the Great remarked that a 'soldier's courage is in his stomach.' The British recognise this principle, for they give their men a good dinner before going into a fight.

"In the Crimean war, the English government sent the famous cook, Soyer, to effect a reformation in this department, and he happily accomplished the object. His army receipts for cooking are published, and I have furnished them to the Captains of each of the companies, but from difficulty in obtaining the commonest articles for the men, they to a great extent have failed with us. I am satisfied that nothing short of the appointment of one or more cooks for each company, and placing the Quartermaster's department in charge of the most efficient and energetic hands, can save our men from great suffering."

Ambulance Corps for the Army.—Surgeon Rufus H. Gilbert, of Duryee's Zouaves, Fortress Monroe, who was ordered here to inspect the recruits for the regiment, is now organizing an ambulance corps. He says "there is no subject of more vital importance for consideration, than the organization of an efficient ambulance corps for each regiment now in the field. These should be composed of men of physical strength as well as intelligence and presence of mind, and able, after instruction from the surgeon, to arrest the flow of blood from any wound, or administer to the immediate necessities of the wounded upon the field before the surgeon could possibly see them. The number of surgeons to a regiment is so small, as to render it impossible to see every one as soon as wounded, and frequently a little immediate attention and prompt action would save the lives of brave and noble men. The want of such a corps with proper ambulances was very greatly felt at the battle of Bethel."

General Hospital at Fortress Monroe.—A Correspondent of the Boston *Medical and Surgical Journal* writes as follows:—"In the first place, what is the General Hospital at Fortress Monroe? It is an institution organized by order of Gen. Butler, for the purpose of affording the best possible (under the circumstances) surgical and medical aid to the large body of troops under his command. To take charge of such an hospital, first at Annapolis and afterwards at this place, a gentleman was summoned, whose reputation as a surgeon is widely extended, and who in one department of surgery has gained a character of skill in diagnosis and operation, with success in results, not confined even to this continent, and hardly second to that of any surgeon living. I allude to Dr. Gilman Kimball, of Lowell, Mass. The propriety of Gen. Butler's selection can hardly be doubted by any one who knows that, in addition to this, Dr. Kimball has had charge, for twenty years, of a large hospital at Lowell, particularly directed to the treatment of surgical injuries from machinery, &c., occurring in the numerous factories at that place. For assistants, there are at present two, Dr. Harwood, of Mass., and Mr. Francis, of Lowell, the latter an intelligent and indefatigable young gentleman, who has had the advantage of having been for two years past an assistant to Dr. Davis, at the Marine Hospital at Chelsea, Mass. Besides these, there are twelve nurses, nine of whom were selected by Dr. Kimball, and the remaining three sent by Miss Dix. They are all that can be desired, and though it is understood that most 'regular' surgeons of the army prefer male nurses, others, both in Europe and this country, as competent to judge and perhaps fully *as* unprejudiced, think otherwise, and claim great benefits as arising from the influence of such female attendants on sick and wounded soldiers. One of these nurses, Mrs. Sawyer, has had charge of the nurses at the hospital at Lowell, has charge of those here, and is in every way perfectly adapted for her position. There are, besides, many intelligent and useful male attendants detailed for this duty from the various regiments, and any number more can be obtained when absolutely required by the exigencies of this particular service."

Surgeons Sanborn and Childs, 1st Vermont Regt., Volunteers, Newport News, Va.—Inquiries having been made by the Governor of Vermont as to the efficiency of the surgeons of this regiment, on account of complaints made to him, Col. Phelps writes in reply:—"Our sick have been numerous and our hospital accommodations slight, and I could not say that the same complaint would not have been made if any other person had occupied the positions of Drs. Sanborn and Child. Such service as we have had cannot fail to be attended with suffering; but our Regiment has had as little of it, probably, as any of the new Regiments." Lieut.-Col. Washburn says:—"Dr. Sanborn has had many difficulties to contend with. He has been compelled to organize a hospital, many times without sufficient room or conveniences; there has been a great deal of sickness in our camp; frequently, at the morning report of the sick, a large number have been awaiting his examination; many times since we came here the hospital has been entirely filled, and no room—and he would be more than human if he had not at times found his patience exhausted. But he has, so far as my observation extends, endeavored faithfully to perform his duty. Our accommodations are now enlarged, our necessities for the comfort of the sick are now supplied, and they are as well cared for as is possible. Both the Surgeon and Assistant-Surgeon are attentive, careful, and earnest, and the people need have no feeling of apprehension that their friends are not well cared for."

Want of Suitable Clothing.—Complaints like the following, from a private at Camp Hamilton, are too frequent: "There is a general dissatisfaction about underclothing, having received when we went to Fort Schuyler, one pair of drawers, one under-shirt, and no stockings; and, on that account, a good many have sore feet. I wrote to you when at Fort Schuyler, to send me some underclothes and stockings, but I never received them. I should be very much obliged to you if you will send me a few pairs of stockings, as I have but one pair now, and they are almost worn out."

Medical News.

A New Work on Venereal.—Messrs. Blanchard & Lea, of Philadelphia, announce a new work in press on Venereal, by Freeman J. Bumstead, M.D., of New York.

The Degree of M.D. conferred.—At the recent commencement of the University of Pennsylvania, the degree of M.D. was conferred on R. R. Murphy and Henry Essig.

Medical Officers of Public Boards of Philadelphia.—On the organization of the Board of Prison Inspectors, Philadelphia, Dr. John B. Biddle was elected President. On the same day, July 3d, the Board of Health also organized by electing Dr. Paul Beck Goddard, President, and Dr. James McCrea, Secretary.

Experiments on Living Animals interdicted.—As a result of the petition presented to the French Emperor by the Society for the Prevention of Cruelty to Animals, an order has been issued by the Minister of Agriculture and Commerce, positively interdicting the employment of living animals for physiological experiments and practice in operations at the Veterinary Schools.

Discovery of Gutta-Percha.—The discovery of this important material is attributed to a physician—Dr. Montgomery—whose attention was drawn to it while travelling among the Malays.

A new Analytical Sanitary Commission.—The London *Lancet*, which, eleven years ago, created such an excitement among London grocers and tradesmen, by the publication of the adulterations of articles of food when submitted to microscopical analysis, together with the names of the dealers, announces another series of articles on the same subject.

Army Surgeons in the Field.—From a recent statement we learn that, from the beginning of the Indian Mutiny until the fall of Lucknow, the number of surgeons and assistant-surgeons killed and wounded in action was seventeen. There were killed at Lucknow alone, two; wounded severely, two; total, four. Killed at Jhansi, one; severely wounded, one; both in the same regiment. Of the Arrah party, after the other two officers were killed, Assistant-Surgeon Clarke, of the Thirty-fifth Regiment, commanded until he was himself mortally wounded. It was Surgeon Hone (Victoria Cross), of the Ninetieth Regiment, who commanded the party of doolies when cut off from the column at Lucknow; and it was Assistant-Surgeon Wilson, of the Seventh Regiment, who saved the life of the Duke of Cambridge, at Inkermann. It is, then, fairly asked, why are not army surgeons equally rewarded with other officers, since they are equally exposed? Why should there be no brevet, which is at least harmless in its operation? There was one in the late Company's service at last, and we concur in the regret expressed that it is not still in force.—*Lancet.*

Trial for Alleged Mal-Practice—Verdict: No Cause of Action.—The Cortland Co. (N. Y.) *Republican* contains the following:—Among the various cases tried at the late session of the Supreme Court, none has so intensely interested the public as the trial of Dr. Riggs for alleged surgical mal-practice. The suit was brought by Ansel Grinnel, a wealthy farmer of Onondaga county, claiming damages to the amount of $5000. on account of a false joint following the treatment of a fractured arm. The doctor, in the complaint, was charged with neglect and want of skill. These charges, to those who had known Dr. Riggs through a long professional life, seemed strange indeed. The result of the trial shows how false they were considered by the jury.

The trial began on Monday morning, and did not close until late on Thursday afternoon. After the enlightened and able charge of Judge Campbell the jury retired, and in due time returned with a verdict of "No cause of action." This verdict gives great satisfaction to the numerous friends of Dr. Riggs.

We cannot forbear the remark that it was a touching sight to witness that old man with his "crown of glory" after a laborious and successful professional life of nearly half a century, sit there and endure a trial for four days, on a charge of incompetency and unfaithfulness, with the accompanying taunts and insinuations incident to such an ordeal. But such is the ingratitude shown at the present day by many towards surgeons. And, so far as our observation goes, these vexatious and mercenary suits are generally brought against those who have by long experience and diligence acquired a reputation for skill and faithfulness in their calling. We are frequently told that even surgeons of the firmest reputation for knowledge and skill undertake the treatment of a broken bone or a luxated joint with trembling, lest, for want of a perfect restoration of the part, which in the very nature of the case it is impossible in hundreds of cases to obtain, they be dogged through weary months and years with lawsuits instituted under the incitements of unprincipled doctors, hungry lawyers, or mercenary patients. It must be clear to thinking men that it is for the interest of the public that they set their faces against this species of vandalism which has of late become so prevalent against physicians and surgeons.

Warm Meal at Night for Soldiers.—In a discussion before the Epidemiological Society of London, which followed the reading of a paper on the climatology, topography, &c., of Hong Kong, China, by Dr. Smart, the following interesting facts were elicited:—

"Dr. Milroy referred to Dr. Smart's opinion with reference to the liability of soldiers and sailors to disease at night, when they are so long left without food, and not unfrequently inadequately protected by covering and clothing. He was of opinion that much remained to be done in the army and navy with reference to the proper berthing, clothing, and providing support for the men during the night. The great period for the invasion of cholera and other epidemics was between ten at night and six in the morning.

"The Director-General of the Medical Department of the Army had much satisfaction in stating that Dr. Smart's suggestion to provide a warm meal for the soldiers at night was already in use in the army, and had been adopted with marked benefit among the troops in China. Those troops had been well fed and clothed, and in every way well cared for. He exhibited the following statistics of the British army in China during the late campaign from May 1st to November 11th, 1860.

	Europeans.	Natives of India.
Number	9069	4920
Deaths	224	79
Mean sick	418	156
Ratio of constantly sick per 1000	46.09	31.71
Annual ratio of deaths per 1000 of strength	45.3	29.45
Ditto, exclusive of killed in action or dead of wounds	38.43	29.76

"Dr. Gallagher, R.N., observed that a warm meal at night had been common in many ships in the navy, without reference to the Admiralty or other superior authority beyond the captain of the ship. In the ship to which he belonged in the Baltic, during the war with Russia, the night-watches were allowed a certain period to smoke and have a basin of coffee. The same practice was in use in other ships, and with great benefit to the crews. He trusted that a recommendation from this Society would induce the Admiralty to render it compulsory in our navy to issue a night-meal to those on duty, as was the case in the French navy."

Original Lectures.

A COURSE OF LECTURES ON CHANCRE,

DELIVERED AT THE BALTIMORE INFIRMARY.

BY

WILLIAM A. HAMMOND, M.D.

PROFESSOR OF ANATOMY AND PHYSIOLOGY IN THE UNIVERSITY OF MARYLAND, SURGEON TO, AND LECTURER ON CLINICAL SURGERY IN THE BALTIMORE INFIRMARY.

Lecture III.

Gentlemen—In the last lecture I considered the treatment of the soft chancre as it runs its regular course, and of two of the accidents to which it is liable—inflammation and ulceration. I told you that the non-indurated or simple chancre was altogether a local affection, and one that required only local means to arrest its course. You have seen many cases in this Infirmary which abundantly prove the truth of this view. You have seen chancres which had taken on a strong reparative action, and which were therefore no longer of specific character, get well under the simple application of a solution of tannin in water. They would have been cicatrized without anything. The astringent only accelerated the cure. You have seen, when the chancre was still progressing, the sulphuric acid and charcoal paste applied, and you have witnessed how, after a few days, the slough became detached, leaving a healthy sore exposed which rapidly healed. Under neither condition was any constitutional treatment employed, unless when from debility a tonic was required, and this was always iron and quinine.

It may seem like too much repetition, but I feel that I cannot too frequently urge upon you the uselessness—the impropriety of administering mercury in the treatment of the simple chancre. I am sure that the cure is retarded by it, and that a disposition to phagedena is often engendered by its action; and yet how uniformly in this country is mercury given for the treatment of this class of venereal ulcers. A patient has a chancre or a sore of some kind on his penis, and without endeavoring to ascertain its character the bi-chloride or the protiodide, or some other preparation of mercury, is prescribed, and perhaps mercurial ointment is in addition rubbed every night into his thighs. Salivation is produced, the chancre does not heal, and more mercury (or another course, as it is called) is administered. At length the gums become horribly sore, ulcers appear in the mouth and throat, pains in the bones are produced by the least change in the weather, and perhaps an eruption makes its appearance on the skin. The chancre, if it has not got well in spite of the treatment, is now exceedingly liable to phagedena. If this occurs, of course the danger is very much increased; in any event, the miserable victim is broken down in health, and the space of his life materially shortened.

Look at the man in St. John's ward, whom we have seen daily for the last month. Ulcers in his nostrils, part of his superior maxillary bone gone, and a large hole existing in consequence in the roof of his mouth. Scarcely a tooth in his head, his gums ulcerated, his breath fœtid, his general health almost destroyed. And yet this man never had any venereal sore but a soft chancre, and consequently has never had constitutional syphilis. But he has taken mercury almost constantly for the last two years, and hence his deplorable condition. Happily he is improving under the use of the iodide of potassium, which, as you know, removes mercury from the system with great certainty.

We cannot wonder at this indiscriminate employment of mercury in chancres. It is advised in almost all the text-books of surgery in use in this country, and has been handed down from generation to generation as a principle of medicine of inestimable value. He has a chancre, therefore he must be mercurialized. Let us rather adopt the maxim:—He has a *soft* chancre, and therefore he should *not* be mercurialized.

In the next place I called your attention to the treatment of the inflamed chancre, a condition which, as I mentioned to you, is too frequently induced by insufficient cauterization—irritation in fact without cauterization. Sulphate of copper, acetic acid, and nitrate of silver, will not do to use as escharotics when the chancre is fully formed. They only add to the irritation already existing. When this state is present, heat and moisture, properly applied, are the principal agents to be employed. If gangrene occurs, tonics and stimulants internally, with mildly stimulating applications to the part, are to be had recourse to.

Excessive ulceration was next considered. In the serpiginous form I directed your attention to the use of iodine as a remedial agent capable, in my opinion, of exercising a greater curative influence over this form of the disease than any other with which I am acquainted.

In the present lecture I wish to bring before you the principles which should guide you in the treatment of phagedena, and the buboes originating from soft chancres.

I have already dwelt sufficiently on the causes of phagedenic action, and the pathology of this complication of the soft chancre. The treatment of it requires promptness and decision on the part of the surgeon. With these qualities on his part it can generally be arrested. The first thing to be done to a phagedenic chancre is to entirely destroy the morbid character of it. This is done by some one of the escharotics I have mentioned, freely applied. The sulphuric acid and charcoal paste is that which I prefer. The whole surface of the sore is to be covered with it, and the surrounding skin as far as the diseased action appears to extend. You already know the action of this paste, and I will not, therefore, dwell longer upon it. Do not try any milder caustics; they will be unavailing, and but increase the morbid action.

But there is something else to be done. Phagedena most generally depends upon a constitutional difficulty. Mercury has been given to excess, or the individual is scrofulous, or he has become depressed mentally and physically by his affliction, or he has lived improperly. It is therefore necessary to rectify all this. Good diet should be given, plenty of fresh air should be afforded, and above all some one of the preparations of iron should be administered. I have tried nearly all of them, and cannot but agree with Ricord that the potassio-tartrate is the best. It seems to be almost a specific against phagedenism. The formula which I generally use is

℞ Ferri et potass. tart. ℥i.
Aquæ ℥x.

Of this I give half an ounce three times per day, and at the same time direct the diseased part to be kept constantly moistened with it both before and after the detachment of the slough caused by the caustic paste already mentioned.

But you will find cases that resist all treatment, and in which the patient, worn out by the discharge, and irritation produced, gradually succumbs. I have seen several such, and terrible cases they were. In all of them I am sure the progress of the disease might have been arrested by the treatment I have recommended, if they had been subjected to it sufficiently early. Everything depends upon prompt and decided action. When the disease has acquired much headway, when the phagedenic surface is several square inches in extent, it is a difficult task to stay the morbid progress. But the principles of treatment do not vary, and no matter how large the ulcer I should not hesitate to apply an effectual escharotic to it. The irritation would be great, but might be subdued by opium or chloroform. I cannot conceive of its leading to worse results than the unchecked phagedena. The potassio-tartrate should also be used as before directed, but in somewhat larger quantities—as high as a drachm for a dose—and the strength should be supported with alcoholic stimulants.

Ricord mentions that in two cases of phagedenic chancres which came under his notice, the subjects were attacked with erysipelas, and in consequence cured of the first named disease. Without therefore positively asserting it, he is disposed to regard erysipelas as a specific for phagedena—rather a bold supposition to form from two cases. However, there may be something in it. No one else, to my knowledge, has observed anything of the kind, nor so far as I am aware noticed the occurrence of the two diseases in one person. We should not reject M. Ricord's hypothesis, but we should be careful about accepting it without further proof.

And next, in regard to the treatment of the buboes produced by the simple chancre. These, as you will recollect, are of two kinds; one a simple non-virulent adenitis due to irritation, the other a specific abscess caused by the absorption of the pus from the chancre. The one capable of resolution, the other always suppurating. You have seen many examples of both. There are several now in the house which you have had ample opportunity for studying, and to which I have daily directed your attention.

Now the fact that the simple adenitis may terminate in resolution, whilst the virulent bubo always suppurates, must be our main guide in the treatment of these affections. It is, therefore, important, if possible, to be able to distinguish one from the other at the earliest possible stage of their progress.

I am not sure that this can always be done, but there are some circumstances which are of considerable service in assisting us to form a correct diagnosis.

In the first place, the simple adenitis advances slowly, and is generally unattended with pain. The gland enlarges, but evinces a disposition to remain in this condition. It is soft, presenting, therefore, in this respect a striking difference from the indurated bubo of the infecting chancre, to which I shall in a future lecture ask your attention. Should it suppurate it does so indolently; and when the skin over it breaks or is opened, the pus is discharged without the edges of the wound becoming inoculated. Sometimes the gland continues to occupy the cavity, as is the case in the man now in St. John's ward. It must be destroyed before the ulcer can heal.

The virulent bubo, on the contrary, is almost invariably of rapid growth; suppuration takes place early, and the inflammatory action is accompanied with considerable pain. The integument covering the abscess, if not punctured, sloughs, leaving a large open sore—a true chancre. The pus from this bubo is, of course, inoculable. You saw me not long since demonstrate this fact to you. The gland is destroyed early, and a cavity of large size, requiring a long time to be filled up, remains.

As I have said, the ulcer left after the opening of the virulent bubo—the bubo of absorption, as Ricord calls it—is a true, soft, non-infecting chancre, one liable to phagedena in perhaps a greater degree than the original chancre. Why this is so I do not know, unless it is that by this time the patient's constitution has become broken down, or the large quantity of mercury which in all probability he has taken, has commenced to exercise its deleterious effects upon his system. So far as my experience goes, I have seen many more phagedenic chancres in the groin than on the penis of the male or genital organs of the female.

You see, therefore, how different must be the treatment for the two species of bubo under consideration. For the first, the simple adenitis, discutient lotions, such as that of the sub-acetate of lead or the chloride of ammonium, should at first be tried. These may be conjoined with pressure, not with a truss as some surgeons recommend, for it is apt to lead to ulceration, and almost always increases the pain; but by means of a graduated compress held in place, and firmly too, by the groin bandage which you have so often seen in operation here. Another way of employing pressure is by means of the collodion. The swelled gland is covered daily with three or four coats of this substance applied with a camel's-hair pencil. This dries almost as soon as it is put on, and soon forms a dense covering. As in drying contraction takes place, it exerts no small amount of pressure. The objection to it, however, is, that it does not admit of the use of any other local application. If you are disposed to trust to pressure alone it does very well.

The tinct. of iodine, or the ointment, are also very valuable applications, and frequently of themselves cause the restoration of the enlarged gland. For some years, however, I have employed a preparation of iodine which possesses very decided advantages over either the tincture or ointment. You have seen it frequently used here. It is a solution of iodine in glycerine. To one ounce of glycerine I add twenty grains of iodide of potassium, and then dissolve in it forty grains of iodine. You can alter the proportions, if you please, so as to make it either stronger or weaker. The iodide of potassium increases the solubility of the iodine, and should be about half as much in quantity.

The iodide of lead ointment is also a very valuable application to be made to these inflamed glands. A portion as large as a pea is to be rubbed in night and morning. I have several times seen buboes of the non-virulent kind disappear under the action of this agent.

If, however, all efforts to effect dissolution should fail, are we to allow it to open spontaneously, or are we to incise it? I think there can be no doubt that the latter is the preferable course, and it should be performed early in order to save as much of the skin as possible. If the abscess is allowed to break, the skin almost always sloughs to a considerable extent, and an ugly-looking sore is left, which only heals after a long time has elapsed.

In regard to the character of the incisions I prefer Vidal's method, of numerous small ones made horizontally into the base of the tumor, to an extensive cut laying it open its whole length. The advantages have been, in my hands, that the healing process was much more rapid, and I have never witnessed the formation of sinuses which some writers state so frequently follow this method of operating. You have seen this plan pursued here with the best results.

But a method which I prefer even to the foregoing is one which I have employed for several years past with very excellent results. It consists in passing several small sutures through the back of the swelling. These are formed of several strands of silk, and are inserted with a common needle. The pus drains slowly off, and a mild inflammatory action is produced by the sutures in the walls of the abscess. Pressure is applied, and as the pus escapes the walls of the cavity are brought in apposition. The sutures are now removed, and it generally happens that adhesion takes place, and that the cavity is thus entirely obliterated.

I have not had an opportunity this season of showing you the beneficial results of this method. Some of you, however, will doubtless recollect the case in which it was employed last year during the short time that I had the surgical charge of the infirmary. The patient entered the house with a very large abscess of the groin, the result of a non-virulent bubo. I passed two setons through its base at right angles to each other, and applied pressure. In two days the pus had entirely escaped, and in a week afterwards the cavity was entirely obliterated, and the patient, a sailor, was discharged. I saw him a few days since in the street, and he informed me he had had no further trouble.

It is not every case that admits of this treatment, for the reason that frequently the swelling is not sufficiently elevated above the surrounding parts to allow of the management of the needle with facility. It ought to be passed through the base of the abscess, and not through its summit, otherwise sloughing is apt to occur, as was the case in some of my early trials.

The danger of opening a bubo would not perhaps strike you as being worth mentioning; and when we think of the frequency with which the operation is performed with impunity, the risk certainly cannot be regarded as very imminent, and yet I once lost a patient, a soldier, all from this very simple affair. He had a large bubo, which I laid open its whole length (it was before I knew the advantages of the methods I have mentioned). Pyæmia followed, and he died with all the symptoms of purulent absorption. After death abscesses were found in his liver, and collections of pus in his lungs and spleen. This is the only instance of the kind with which I am acquainted, and I mention it more as a surgical curiosity than anything else. Pyæmia has, however, followed the opening of other abscesses, and of course there is no reason why the operation on sailors should be specially exempt from its occurrence.

So much for the simple adenitis, the non-virulent bubo, the pus of which is laudable with no specific properties, and therefore not inoculable; next we have the chancrous bubo, the pus of which is specific, and from which true chancres may be produced, to consider.

As I have already told you, this bubo is produced by the direct inoculation of the lymphatic gland with the chancrous matter carried to it by the lymphatic vessels As Ricord has emphatically said, the abscess formed is a depot of chancrous pus. The main facts in regard to its symptoms and pathology are, that it progresses rapidly, that it is generally attended with pain, and that it invariably suppurates. The treatment, therefore, should differ materially from that required for the other variety. There is no use in applying discutient lotions; no use in iodine; no use in pressure—all in fact are injurious. What you want to do is to hasten suppuration. This is accomplished by heat and moisture. The chamomile cataplasm is the best vehicle for these agents I know of. Other poultices will answer, or even warm water applied by means of several folds of flannel, and covered with oiled silk, will relieve the pain, and bring matters to a head.

After you are satisfied that pus is formed in sufficient quantity, that is, when the whole lymphatic gland has suppurated—a point which you will determine by your tactile sensibility—lay the abscess open so as to allow the freest channel for the escape of the pus. And now comes the main part of the treatment.

You may be doubtful whether or not you have a virulent bubo to manage. If you see the bubo from the first, or if you can rely upon the account of it given by the patient, you are not likely to be mistaken. In any event you will lose nothing at this period by charging the point of a lancet with the pus from the bubo, and inserting it into the thigh of the patient. If you have a chancrous bubo to deal with, a chancre will be produced at the point of inoculation. This is first evidenced by the redness circumscribing the inoculated spot, and which is present after the first eighteen hours. At about the fortieth to the forty-eighth hour a little pustule is formed, with a black summit caused by extravasated blood. This is the chancrous pustule, and is to be cauterized with nitric acid, Vienna paste, sulphuric acid, and charcoal paste, or with what is less severe and answers perhaps equally well at this stage, nitrate of silver freely applied.

Having obtained an affirmative result from the inoculation you have no longer any doubt as to the character or the bubo, or, as it is now, the ulcer. You have in fact a true soft chancre to treat, one which is peculiarly liable to be attacked with phagedena. You should, therefore, at once proceed to apply the escharotic paste freely to the bottom and edges of the sore. Undoubtedly this causes severe pain, but this does not usually last more than three or four hours, and is not greater than that caused by the nitric acid or Vienna paste. After the paste is applied, the part should be covered with lint spread with simple cerate and bandaged. In the course of ten days the paste and slough come away, and you have a healthy non-specific ulcer left, which heals without difficulty.

You have seen this process gone through with here, and I have already sufficiently described it, so that there is no necessity for me to enlarge more upon its operation. If you do not destroy the specificity of the chancre it will almost certainly enlarge.

You perceive that I prefer to open this form of bubo with a long incision. The multiple openings of course are not applicable, for the reason that they become inoculated, and you have half-a-dozen chancres to treat instead of one, and moreover, you have no opportunity of applying the paste with advantage, unless you can get free access to the interior.

This concludes all that I have to say to you, at present, relative to the soft chancre and its complications. In the next lecture we will enter upon the consideration of the indurated and infecting chancre.

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Employment of Glycerine in Surgery.—The first application of glycerine in the treatment of disease appears to have been made in England about the year 1846. Having been first employed in certain diseases of the skin, it was applied by Dr. Demarquay in the treatment of wounds, ulcers, and certain affections of the genital organs. It was afterwards successfully applied to the dressing of wounds and even to those which had become painful. In an epidemic of hospital gangrene which occurred at the Hospital St. Louis, at Paris, after having employed without success lemon juice, nitric acid, and the red oxyd of iron, Demarquay made use of glycerine with a success surpassing his expectations.—*Am. Jour. Sci. and Arts.*

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Professional Tricksters.—In that well-furnished nursery lies a sick child, tended by its officious nurse, and watched by its sensitive mamma with continued and restless solicitude. The care bestowed upon the infant is out of all proportion to the exigency of the case. The child is ill and may possibly die, but will, under ordinary care and attention, in all probability recover. The medical man who has charge of the case is a well-informed and experienced practitioner, perfectly aware of the contingencies of the ailment, and calmly alive to the whims and fancies by which he is beset. His little patient lingers on; his credit is on the wane. Another practitioner is named of infallible skill, particularly in cases of this description; and he is called into consultation along with the family medical attendant. At the appointed hour, a carriage and pair drive up to the house, no knocker is raised, for fear of a noise; only the door-bell vibrates gently; and in walks the pattern M.D. He is a tall man with an obsequious stoop, and his knees slightly bent. His hair is brushed back; he wears gold spectacles, a white tie, and a black suit. There is no creaking of his shoes, and his manner is bland and soothing. He hangs over the crib of the dear sick child in a solemn attitude of observation; touches it lightly, listens to its breathing, feels its tiny pulse at the wrist, and then, quietly looking up, asks the old practitioner, who is standing by and looking on, whether he has given his little patient *Tous les mois*—a panacea at that time only just introduced. The answer is in the negative. What?—Not!—replies the pattern, with an affected look of surprise; not given *Tous les mois?* *Tous les mois*, nurse; *Tous les mois*, my lady—turning to the agonized mamma—*Tous les mois* will cure your child! The old practitioner is dismissed, on the score of ignorance, and under the judicious use of *Tous les mois* the child recovers.

There are tricks in every trade, but of all tricks, professional pedantry is the most detestable. It has it all its own way. The party duped can have no insight into the secrets by which he is guided in the management of his property, his soul, or his life. He must trust implicitly to the integrity and skill of his professional adviser, whom he flies to in moments of the last resort. It is in the embarrassment of such occasions that the trickster succeeds. There is the opportunity of putting himself forward, and he seizes it with adroit avidity.—*Medical Critic and Psych. Jour.*

Original Communications.

WHAT IS REFLEX PARAPLEGIA?

BY
M. GONZALEZ ECHEVERRIA, M.D.,
OF PARIS,
LATE ASSISTANT PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND THE EPILEPTICS OF LONDON, CORRESPONDING MEMBER OF THE ANATOMICAL SOCIETY OF PARIS, FELLOW OF THE MEDICAL SOCIETY OF LONDON, ETC. ETC.

UNDER this heading the *British Medical Journal*, in its issues of April 27, and May 25, of the current year, contains a leading article on the recent work "*On the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by C. E. Brown-Séquard, M.D., F.R.S.*" In analysing the topics discussed in this valuable contribution, the writer shows himself very sceptical, reviewing, certainly with ability, the opinions assumed by Dr. Brown-Séquard on the nature of reflex paralysis, and questioning the effects of strychnia, which is considered by the learned physiologist the best agent in this affection.

That, clinically speaking, there is a form of paralysis quite distinct from that supervening upon organic alterations of the nervous centres, is a medical fact recognised long before the latest writings of Dr. Brown-Séquard. The affection, called *paralysie essentielle* by French pathologists, is more wisely regarded by the eminent Graves, of Dublin, as the effect of *a cause which, commencing its operation on the extremities, and not on the centres of the nervous system, might, by a reflex action, produce very remarkable effects on distant parts.* Between this explanation and the generic term of *reflex paralysis* employed by Brown-Sêquard, and also by Romberg, there is no difference whatever. I need scarcely say, that no originality of nosological innovation is pretended by Dr. Brown-Séquard, whose aim has been to give an account of the nature of the disease, and in this way, to indicate more clearly than had previously been understood, its distinction, and the value of the remedies suitable for it. Those who have tested by their practice the views advanced by the physiologist, should be the best judges of their trustworthy results; clinical questions must be decided practically, and well observed facts have an intrinsic value which mere hypothesis, no matter how plausibly put forth, can never claim. Therefore, I may be permitted to assert here, that I have witnessed the treatment recommended by Dr. Brown-Séquard; and I have observed its entire success in several of his patients at the National Hospital for the Paralysed and the Epileptics, as also in cases which I have attended myself privately.

But this evidence (I refer to that of Dr. Brown-Séquard's cases) will not probably satisfy the sceptical mind of the reviewer in the British Medical Journal, unless shown to be in nowise contradicted by his own arguments. Let us then see what they are.

If contraction in bloodvessels of the spinal cord be the cause of reflex paralysis, "*how comes it that the cord does not become originally affected through such a cutting off of its nutritive supply?*" Admitting, after Brown-Séquard and Comhain's experiments, that contraction in bloodvessels of the spinal cord has an important share in the production of reflex paralysis, I have, however, advanced[*] that its over-excited incitability, through the sympathetic, has no less influence. The intimate connexions between the nerves generally affected and the ganglionic system, whose spinal source, and important influence in the causation of convulsive accidents, usually precursory of reflex paralysis, have been proved beyond doubt, sustain this assumption. And now, then, excitation of the distal end of a nerve may be attended with contraction of blood-vessels, and a depressing influence of the spinal cord, which can last without continuance of the former, and hence, circulation may be disturbed at the outbreak of the paralysis in the spinal cord, without this becoming afterwards organically affected. But, though no external evidence of morbid change has heretofore been detected in the nervous centre, yet the microscope may reveal ere long some overlooked alteration in the structure of the cord. For further proof that inhibited nervous incitability is a principal cause of reflex paralysis, I must mention that muscular irritability is always more or less affected in this disease—atrophy being, likewise, constantly its immediate effect;—both phenomena accounting for nervous exhaustion. Reflex, however, is not the only kind of paralysis involving the sympathetic. There is a peculiar form of paraplegia, depending upon a cerebral influence, pointed out by Duchenne de Boulogne,[*] in which voluntary movements are impeded, the muscles being, nevertheless, quite hypertrophied without losing their contractility. And curious to remark, such hypertrophy is mostly exhibited by the extensor muscles, a fact, it seems to me, in striking accordance with the observation made by C. Bernard, that irritation of the sympathetic determines tonic contractions on the extensor muscles. Why, in this case, should not paralysis of the sympathetic, increasing the amount of blood in the extensor muscles, be the cause of their hypertrophy and preserved contractility?

Another statement closing the inquiries of the review, and intended as an argument against the value of the treatment advised by Dr. Brown-Séquard, finds its place here, as it refers to the state of circulation in the spinal cord. Let us at once examine it. "*Myelitic inflammation of the cord or its membranes does not consist simply in blood congestion of these parts. The congestive state ceases, and then come exudation and compression of blood-vessels, and a diminished supply of blood; but still myelitis exists. Yet we are told that we must not give strychnia, because it increases the flow of blood to the part by relaxing the blood-vessels, which are already compressed by the inflammatory products!*" Undoubtedly, exudation may be the sequel of myelitic blood-congestion,[†] but I fear very much that *the diminished supply of blood* in the spinal cord is quite hypothetical, not to say a delusion. The writer has certainly overlooked the cardinal fact that inflammatory exsudations, or *neo-membranes*[‡] mostly growing on serous membranes (arachnoidea, pleura, peritoneum, etc.) are always organized and *vascular*, the *conditio sine qua non* to their development being an increased vascularity of the tissue where they germinate. It should be observed that *false membranes* are not vascular, but there is a palpable distinction between *neo-membranes* and these *false membranes*, due constantly to a fibrinous exsudation, and being a layer, never organized nor vascular, formed upon the mucous and serous surfaces. Besides, these false membranes are also the result of blood-congestion, and therefore accompanied with more or less augmented flow of blood in the adjoining tissue. But accepting as possible the compression and disappearance of blood-vessels in the exsudation, they should never cause, as a necessary result, a diminished supply of blood in the remaining portions of the spinal cord. During my researches on the true nature of the so-called tuberculous affections of the vertebræ, I had several opportunities of finding the spinal envelopes very much thickened, and even hardened after inflammation, while there was a softening, or a variable degree of inflammatory congestion of the cord, which in all instances appeared to me with increased vascularity.

As regards the doubts expressed as to the effect of the small dose of strychnia recommended by Dr. Brown-Séquard, and the time required for the cure of reflex paraplegia, the answer will be short. The reviewer gets easily over the repetition and gradual increase of this small dose advised by Dr. Brown-Séquard, who is not the first nor the only practitioner employing strychnia successfully in reflex paralysis. Let me mention Professor Romberg, whose authority is generally known, and who considers the preparations of nux vomica as well suited to hysterical as to other forms of reflex paralysis. This eminent neurologist reports, among others, a case attended by Dr. Hunt, which not only illustrates the advantage of strychnia (the active agent of nux vomica) but also its rapid effects. The shortness of the report has very probably been the cause of Dr. Brown-Séquard's critic not being aware of this case, and so, we fancy, that he will be glad to find it transcribed here.

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[*] See *Am. Med. Times*, Vol. II. No. 20, p. 315.

[*] De l'electrisation localisée et de son application à la pathologie et à la thérapeutique. Paris, 1861. p. 858.

[†] In most cases these exsudations are the result of meningitic inflammation; when observed in the cord itself they usually are the sequel of hemorrhage, or even they may be the effect of abnormal capillary vascularity, as it is in epilepsy according to Prof. Van der Kolk's recent researches, and then they are of an albuminous nature.

[‡] See this word, in P. H. Nysten, Dictionnaire de Médecine, de Chirurgie, de Pharmacie et de l'art Vétérinaire. Onzième Edit. par E. Littré et Ch. Robin. Paris, 1858.

"In the month of February of the present year (1851), a woman, aged 33, applied in the Policlinique, who on the 25th of January had been delivered of the third child, by the forceps, after a heavy labor, which lasted twelve hours. During parturition she suffered from painful spasms of the left leg, and on the following and subsequent days, after she had left her bed, complained of lassitude, difficulty in walking, and diminished sensibility of the left foot. The examination showed that the sensibility of the left thigh and leg was normal, but that it was deadened on the dorsum and in the sole of the foot, so that the patient could not distinctly feel the hand when passed over it, or the ground when she put down her foot. The diminution of motility was betrayed by a laborious dragging of the leg in walking, and by the difficulty with which she executed all the movements. The veins were varicose, the uterus had remained prolapsed after delivery. A purgative was ordered, followed by friction with oil of turpentine, and the internal exhibition of the spirituous extract of nux vomica, commencing with half a grain, and increased to one grain, three times a day. The result was so completely satisfactory that the motility and sensibility were entirely restored, and on the 3d of March the patient was discharged cured."*

In order to leave the reviewer fully satisfied about what he calls *a complicated tale of therapeutics*, let me add to the above proofs, that in reflex paralysis strychnia acts not only by increasing the amount of blood, which is the source of nervous action, but also by stimulating in a direct manner the incitability of the spinal cord, as has been recently demonstrated in an excellent paper published by Martin-Magron and Buisson, in *Journal de la Physiologie de l'homme et des animaux* for 1859. Such statements, we think, will be decisive replies to so sceptical a writer as that of the *British Medical Journal;* though, indeed, it should have been more logical with such a positive and cautious mind, not to indulge so much in hypothesis, and to have a more certain ground for his opinions.

4 West 14th Street, New York, July 8, 1861.

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* Romberg "*On Diseases of the Nervous System.*" Vol. 2d. p. 390 Edit. of the Sydenham Society. London, 1853.

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IMPROVED COUNTER-EXTENSION SPLINT FOR MORBUS COXARIUS.

By CHARLES F. TAYLOR, M.D.,

OF NEW YORK.

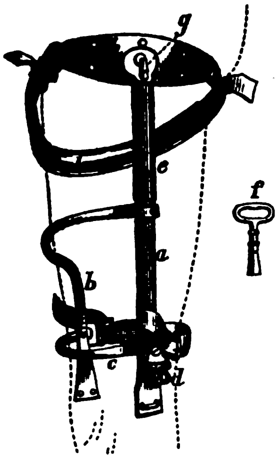
The principle of accomplishing counter-extension and locomotion, at the same time, in the treatment of articular diseases, and particularly those of the hip-joint, which was first brought to the notice of the profession by Dr. H. G. Davis, and latterly more extensively by Dr. L. A. Sayre, together with the instruments used, having attracted some attention, I beg leave to contribute a cut and description of an instrument which, I believe, better accomplishes the design, with fewer deficiencies than any other previously contrived.

The long splints, reaching from the crest of the ilium to the external malleolus, though well calculated to produce counter-extension, yet have several annoyances and inconveniences which in some cases prove actual faults; and it is these disadvantages, which it is the object of the instrument here shown to overcome. The stiffening of the knee-joint not only makes the gait awkward and difficult—a matter of some importance in overcoming objections of the better class of patients in mild or incipient cases—but, to avoid the danger of stumbling, the effort to raise the foot over obstacles in progression must be made *at the hip;* thus tending so far to counteract the action of the instrument, and to force the head of the femur against the acetabulum.

A long splint is only necessary in order to secure space to which to attach adhesive straps to the thigh and leg; and, indeed, a short splint of the same construction coming only to the knee is sometimes used; but, I believe, in most cases, it is deficient in power.*

But considering that there is much more available space *inside* the thigh, than between the knee and ankle on the outside of the leg, I constructed an instrument, in the latter part of last year, with a branch passing from the external splint over just above the knee, to the inside of the thigh, with a brace to support it passing to the external splint higher up, as shown at *b* and *c* in the accompanying cut.

With both the internal and external parts of the instrument thus coming only to the knee, two three-tailed adhesive straps, attached respectively to the internal and external aspect of the thigh, may be fastened to the buckles, as shown. And I believe the power of this instrument is greater than any long splint can possibly be, with the advantage of leaving the motions of the knee-joint as perfectly free as before the instrument was applied. The management of such a constructed splint is very simple and obvious.



A, external part of splint, formed of one half a longitudinal section of a tube; *b* and *c*, branch and brace passing over to the inside of the leg; *d*, buckle and loop to receive the end of adhesive strap—same on the inside; *i*, *e*, short piece sliding over *a* to lengthen it; *f* and *g*, key and screw—the latter concealed inside of *a e*—to lengthen the instrument; *n*, flange fastened to *a*, *e*, by rivet joint, fitted to *a*, embracing about one third of the thigh; *i*, perineal strap.

The second disadvantage of all splints heretofore constructed consists in the fact, that, from their manner of construction, they must necessarily reach upwards from the trochanter to the ilium in order to bring into action the perineal strap. But with the motions of the leg, this short end of the lever must sweep forth and back across the hip, imparting more or less of vibration or jerking to the perineal strap, and thus increasing the liability of irritation, and perhaps excoriation, of the groin, besides the unpleasantness of such unsteadiness.

Moreover, in those instruments the perineal strap *encircles* the hip, compressing the anterior and posterior soft parts, the femoral artery and vein, etc., besides wasting much of the force of the instrument in this compression which should be spent only in counter-extension. Besides, it is inconvenient, not to say difficult, to sit down with this extremity projecting back into the pantaloons or dress, all of which inconveniences could be borne if there were no better remedy. But I have known mild cases, that is, in the first stage, to try these instruments and reject them—and consequently get worse—for no other reason than these inseparable annoyances.

By the modification shown in the upper end of the cut, it is believed that all these faults of other instruments are avoided, and some important and positive advantages gained.

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* Dr. H. G. Davis has invented a good apparatus having the desirable quality of coming only to the knee; but the one here shown is much more simple, and was perfected before his instrument was brought to my knowledge.

This modification consist of a flange (N) or piece of elliptical-shaped steel, in length about one-third the circumference of the thigh, to which it is shaped, resting over the joint and passing around in front and behind to meet the perineal strap, in the same line the latter would be in if it kept on to be attached to the end of the common splint at the crest of the ilium. This flange is attached to the upper end of the splint by a common rivet joint, directly opposite the acetabulum. It will be seen that while the instrument remains firm and motionless on the leg, the force is applied with increased efficiency, and the movement of every joint of the limb is most perfectly secured; that at the hip especially not being in the least interfered with by the counter-extension force.

Another important advantage is that there is *no compression* on the femoral vein and artery, or any of the soft parts; the ischium and tendons of the adductors being the only points where the perineal strap touches to exert the whole force of the instrument in counter-extension only.

Another great advantage of these two modifications of this instrument, especially among the better class of patients, is, that it can be worn under the clothing without being suspected, as, not interfering with the motions, and fitting so nicely to the parts, it is not noticed.

Having thus presented to the profession an instrument which I can only hope may prove as efficient in other hands as it has in mine, I close by laying claim to priority of the several modifications here described. And I am forced to do this from the fact that the Medical Times, in its issue of June 29th, had an instrument figured as the improvement of Dr. Sayre, which the reader cannot have failed to notice, is, so far as the contrivance for receiving the adhesive strap from the inside of the thigh, substantially identical with the one here described. This improvement was first shown by me to Dr. Sayre, after I had used it several months, and he has adopted it without giving me the proper credit.

TREATMENT OF WHOOPING-COUGH.

By C. S. SHELTON, M.D.,

OF SPRINGFIELD, ILLINOIS.

The prevalence of whooping-cough in this city, during the past winter and spring, furnished an occasion for testing the value of the extr. belladonna and sulph. zinc, conjointly used, in the treatment of this disease, as suggested by Dr. Fuller in the October No. of the London Lancet. His experience in its use, as there reported, was so successful as to encourage the hope that a remedy was found possessed of the power to lessen the severity and cut short the course of a disease which so often gives rise to years, if not of life-long mischief.

The use of these remedies, as administered by myself in sixteen cases, goes to confirm the testimony of Dr. F. In every case the effect was beneficial, and in the greater number quite satisfactory, cutting short the cough, in some cases, to ten days, with a palliation of all the symptoms. The ages of the children ranged from six months to ten years. I began with those under three years of age with one-sixth of a grain of the extract and half a grain of zinc four times daily, dissolved in water and gum mucilage. To those above that age, a quarter of a grain of the extract and a grain of the zinc, increasing the dose, in some cases, to double the quantity, according as the child could bear it, but never beyond; as the speedy modification of the symptoms rendered it unnecessary in some cases, while in others the system would not bear it. The following effect would be manifest within an hour after taking the medicine, and continue from one to three hours: deep red or scarlet color of the whole surface, particularly of the face and neck; dilatation of the pupil, arterial excitement, dry warm skin, and general excitability of the whole system, which would gradually pass off, leaving no unfavorable effects.

A marked impression upon the disease was the result of the treatment. The paroxysms of cough were less frequent and less protracted, the whoop not as loud, the spasmodic symptoms greatly subdued, bronchial irritation less, a secretion of the bronchia established at an early stage, and the stomach less disposed to reject food.

In the case of my own little girl of two years, an impression was produced in twenty-four hours after taking the first dose. She had coughed severely for ten days, and was cured in ten days from the first administration of the mixture. After three weeks she caught cold, and the cough and whoop returned. She was put again upon its use, with a like happy result.

A boy of seven years had coughed a week, and the cough, with all its attendant symptoms, was increasing in violence. Gave a quarter of a grain of the extract and a grain of the zinc four times daily. The poisonous effects (if I may so call it) of the medicine daily followed its administration. Cured in ten days

Another lad of six years, who had coughed for two months, was cured in two weeks.

The cases mostly occurred during the months of March and April, at a time of general prevalence of coughs and colds and sudden atmospheric changes.

No remedies were given in conjunction with the belladonna and zinc; but in three instances a mixture of syrup of ipecac. and gum mucilage was ordered.

From my experience in the use of the extr. of belladonna and sulph. zinc, though limited, I am led to the conviction that they possess peculiar power in reaching the seat of the disease, and that the whooping-cough need not "run its course."

Reports of Hospitals.

BELLEVUE HOSPITAL.

DISLOCATION OF THE HEAD OF THE TIBIA INWARDS.

[Reported by Henry M. Lyman, House Surgeon.]

Dislocation of the Head of the Tibia inwards. Fracture of the Ossa Nasi and the Superior Maxillary Bone.—Reduction. Recovery.—Edward Holden, a native of Ireland, æt. 40, was admitted to the Hospital on the 22d April, 1861. While engaged in digging a cellar, two hours before his admission, a bank of earth caved in, covering him completely with an avalanche of sand and gravel, from which he could only be extricated by the united efforts of his companions.

On admission, the patient was perfectly conscious, and complained of pain in his head. There was considerable hemorrhage from the nostrils, and from a contused wound of the integument near the outer canthus of the right eye. There was also great deformity of the left knee, which was soon discovered to have been caused by a dislocation of the head of the tibia inwards. The outer condyle of the femur projected under the skin at the outside of the joint, and the inner condyle could be felt as it rested upon the extreme outer portion of the articular surface of the head of the tibia, directly above the articulation of the fibula with the tibia. The leg was adducted by the action of the quadriceps extensor, and the patella was distinctly visible in its new position upon the inner condyle of the femur. The ossa nasi were fractured, and the entire alveolar portion of the right superior maxillary bone was movable in such a way as to suggest the probability of a fracture extending from the base of the nasal process through the antrum maxillare, and terminating in the alveolar process near the second or third molar.

The patient was seen, six hours after the accident, by Dr. James R. Wood, who proceeded to reduce the dislocation, ether having been previously given. The foot and leg were sufficiently adducted to relax the quadriceps extensor; slight pressure was then made upon the inner tuberosity of the tibia, and the bone immediately slipped into its proper place. The limb was then placed upon a double-inclined plane, and evaporating lotions were applied to the knee. No attempt to elevate the ossa nasi was made: the nature of the fracture being such as to prevent any permanent coaptation of the comminuted fragments. *April* 23.—There was considerable swelling of the face and eyelids; and the conjunctivæ were much congested. The knee was very little enlarged, and its temperature was but slightly elevated. Cold lotions were freely applied to the parts.

April 24.—It became necessary to scarify the conjunctivæ. No change in the appearance of the knee. *April* 26.—The swelling of the knee is subsiding; there is a little suppuration about the lacrymal sac of the right eye. The conjunctivæ were again scarified. Patient is quiet, and appears to suffer comparatively little pain. There has been scarcely any acceleration of the circulation since the accident.

In this way the patient continued till May 4, when the swelling of the knee had entirely disappeared, leaving the joint apparently as healthy as its fellow. From that time gentle passive motion was practised every other day. The suppuration about the nasal bones was very profuse, but the conjunctivæ soon recovered their healthy condition.

June 1st.—The inclined plane was removed; a leather splint was applied to the popliteal region; and the patient was allowed to stand upon his feet. From this time his recovery was very rapid. The fragments of the ossa nasi have united with an amount of deformity that is scarcely appreciable, and the patient (*June 12th*) can use his knee without difficulty or pain. The movements of flexion and extension are perfect; he feels no pain in the joint, and can walk for a considerable distance without any artificial means of support whatever.

American Medical Times.

SATURDAY, JULY 20, 1861.

THE NEW CORPS OF BRIGADE SURGEONS.

We have already called attention to the Board of Surgeons of the regular army, now in session in Washington, for the purpose of examining all candidates for the new corps of Brigade Surgeons. As the decision of this board will soon be announced, and those who are accepted will be called into service, we deem it proper to offer some suggestions as to their duties and the professional relations growing out of their positions, that may possibly serve a useful purpose in assisting to render the new corps more efficient, both in its primary duty to the public service, and in its secondary, far reaching, and ultimate results in the advancement of science, and the improvement of the profession.

The character of the Examiners, the public reputation of some of the aspirants, and the honest and truly patriotic intention of the Secretary of War, evinced by the order subjecting all candidates without regard to age, former honors, or published works, to the rigid scrutiny of an impartial and purely disinterested Board, give ample guarantee that the persons appointed will be well qualified, and in many cases highly accomplished medical men. To many of the surgeons who are selected for this service, and who are suddenly transferred from civil society and private practice to the companionship of armed men, the new position will be somewhat embarrassing. They will not exchange without some trepidation, the sober enthusiasm of the clinique and the lecture room, for the sudden and startling exigencies of military practice on a vast scale, and the overwhelming excitements, labors, and responsibilities of the battle-field. We do not propose to recapitulate all the important points in regard to the surgeon's preparation for service and his future conduct, which suggest themselves to us, but it will not be amiss to refer to some of the more obvious requirements, which are on that account the more likely to be neglected.

The Brigade Surgeon will be on the staff of the commanding general. He must, therefore, be his confidential medical adviser in all matters relating to the personal and general health of the command. He will be chief of the regimental medical staff, and the responsible sanitary officer. It will be his duty to exercise a vigilant and wise foresight in providing against probable and possible contingencies; to see that the medical officers are furnished with the means for the correct and exact performance of their duty; to make the life, health, and physical welfare of every soldier his personal and anxious care; and to inspire the officers and men with that confidence and respect which are sure to follow the able, intelligent, and conscientious performance of duty. He should live on terms of friendship and well-bred cordiality with his brethren of the general staff, and cultivate the closest professional relations with the regimental medical staff; he should jealously guard their interests, rights, and reputation, and maintain among them a high standard of professional zeal and courtesy, and faithfully record and report every meritorious and heroic act.

When the Brigade Surgeon is assigned to duty, he should report to the General commanding in full uniform, and completely appointed in all respects. He should be well mounted, and attended by a first-rate body servant. His saddle, bridle, and shabrack should be according to regulations, and of the best kind and quality. He should wear uniform always when on duty with troops, and observe scrupulous neatness in his personal appearance. His servant should be a good cook, be able to cut hair, groom a horse, take care of clothing, and wash when necessary. He should be strong, healthy, honest, and cheerful. An officer filling an important and responsible position, should never be annoyed or fatigued by personal details or by doing anything for himself which can be done by a servant. It is of great importance to a medical officer that he preserve the softness of his hands and the sensibility of the ends of his fingers, as the finger is the best probe in gunshot wounds, and is the surgeon's eye in the deep, dark, and bloody chasms made by shot, sabre, and shell. For this reason he should be careful of the use of his hands, and always wear in riding thick buckskin gloves.

His relation with the General will be that of an adviser purely. If the General see fit to disregard his advice, and disaster follow, the responsibility will rest with him and the military necessities of the case. All official communications should be, as a matter of course, in writing, and carefully recorded.

The relations of the Brigade Surgeon and the Regimental Staff will be more complicated, as they will combine the rights and independence inherent in the republic of science with the authority appertaining to military rank. Any difficulty or collision, however, can be avoided by mutual justice and good-will; and the Brigade Surgeon, if he is ever called upon to exercise despotic authority in a professional matter, will of course assume the entire responsibility. Immediately upon entering on his duties, and when the regimental staff have reported to him, he should invite them to his quarters for friendly, informal, professional conference. If no military reasons prevent, a society for mutual improvement should be formed, in which individual experience could be collected, condensed, and rendered available for present guidance and future publication. All the new and more important points in Military Surgery should be discussed, the rules of operating and the surgical anatomy of operations rehearsed, and the recent works read and considered, point by point and case by case.

The Brigade Surgeon must be prepared to furnish the latest scientific information, and give advice and assistance in any case of difficulty or danger. For these objects, he should be provided with the latest and best scientific books, and with a complete case of instruments, which must contain everything which can possibly be required.

Among the indispenable books should be included a set of small-sized, but excellent plates of surgical anatomy: Gray's Anatomy, or Ellis's; Fraser on wounds of the chest; Williamson on gun-shot wounds; Guthrie (last edition); Bernard and Huette, Stromeyer, Esmarch, and Staham; Tripler and Blackman; Prof. Hamilton's book, Lyon's Hand-book of Hospital Practice; the Reports of the British Sanitary Commission to the East, in 1855 and 1856, McLeod's Notes on the Surgery of the Crimean war. A Dispensatory Anatomy and Practice should be found with every regiment.

As a general rule, where time is allowed, the same law should be observed in the brigade, which obtains in first-class metropolitan hospitals—that of a general consultation on all capital cases. It must be a very rare case in which the surgeon-in-chief will be called upon, in virtue of his rank, to decide against the sense of a general consultation. As a rule, no capital operation, excepting on the field, should be performed without his sanction, and not then, when he is present.

On the eve of a battle, the brigade-surgeon and the regimental staff should meet for final deliberation, and systematic disposition of the force and means at their command. If possible, there should be but one field hospital for the brigade. The site will be selected by the general, and there the best operators and the best anatomists should be stationed, with proper assistants. Assistant-surgeons should be detailed to follow up the line of battle, accompanied by hospital orderlies and ambulances or horse litters, to succor the wounded as they fall, and to select the cases to be sent to the field hospital. Every medical officer on this duty should be provided with the means of stopping hæmorrhage. He should have artery needles in his pocket-case, and persulphate of iron in the hospital knapsack, besides a store of brandy, morphia, and opium, in convenient forms for instant administration, and an ample supply of chloroform. This honorable and heroic task should be shared by the assistant-surgeons in turn, and should, according to circumstances, be personally supervised by the brigade surgeon. It will be an immortal honor to have tied an important artery and saved an ebbing life under a fire of grape and canister. With every train of wounded despatched to general hospital in the rear (often many miles) a medical officer should be sent, well supplied with the means of supporting life, checking accidental hemorrhage, and relieving pain. As soon as a battle commences, beef-tea should be prepared in large quantities by cutting up the beef of the horses which have been killed, in lieu of ox beef, if that is absent or scarce, in a barrel, and adding hydrochloric acid and water. The wounded, in the painful journey to the rear, and awaiting operation, will be wonderfully sustained and refreshed by this fluid nutriment, and the horrible thirst of the wounded (which is but acute hunger) will be effectually and most advantageously appeased. The mortality, after field operations even of the gravest character, will be diminished in a remarkable manner if sufficient support and nutrition are supplied between the two points of injury and operation, and the reception into general hospitals. If the veins are supplied with healthy nutrition, they will have less temptation to absorb pus.

It is worthy of consideration, whether a code of signs cannot be adopted, by means of which the surgical history of each case can be written with a pencil of nitrate of silver upon some parts of the cutaneous surface, to be transcribed and rendered by the hospital surgeon who receives it. At all events, when possible, an assist.-surgeon should act as recorder at the field hospital, and take the necessary notes of each case presented and operated upon.

The Brigade Surgeon should not rest after a battle, until he is satisfied that none are left on the field who can be relieved; and he should detail a medical officer to superintend the burial of the dead from humane, as well as sanitary considerations. It is unnecessary to add, that wounded enemies are to receive the same surgical care and attention as friends, with the single exception that the latter have precedence in order of time.

The crisis is the greatest in history; the subject is inexhaustible. We may return to it again.

THE WEEK.

Dr. David P. Smith, of Springfield, Mass., whose letters from abroad in this Journal have been read with so much interest, gave up his projected tour among the hospitals of Europe, on learning the commencement of the war in this country, and immediately returned home to offer his services to the Government, among the volunteers of his State. He has been appointed Surgeon to Cobb's Light Artillery, which is at Camp Adams, Quincy, Mass., but will soon proceed to the seat of war. We take pleasure in announcing that Dr. Smith will still continue to correspond regularly with this Journal, his field of observation being transferred to the camp and military hospitals, so full of interest and novelty to the American physician. We rejoice to see the medical staff of the volunteer army strengthened by the accession of one so competent, not only to discharge the peculiarly responsible duties of the military surgeon, but so well qualified to gather facts of interest to the profession and place them on record.

The citizens of New York are never weary of seeing military displays in the streets and parks. The tap of the drum always brings together an eager crowd. But great as is their enthusiasm, there are few who did not look upon the parade of the 21st Regiment through our streets on that fearfully hot Tuesday, merely to gratify curiosity, as a positive barbarity. And when one after another of the brave men sank overpowered by the heat and their heavy burdens, until *thirty* left the ranks, and one never again to join them, the popular feeling arose to indignation against such foolish trifling with the health and lives of the volunteers. The lesson will prove, we trust, a salutary one, and hereafter the troops will be allowed to proceed on their way quietly, and in a manner most conducive to their comfort.

A case was recently tried in England for alleged use of forceps and chloroform in midwifery, without a consultation; resulting in loss of child, and injury to some of the nerves of the pelvis of the mother, causing numbness and lameness. Drs. Murphy and Barnes gave evidence that the defendant's practice in using instruments without assistance was wrong, and that he had administered chloroform in an improper manner. Sir C. Locock and Dr. Ramsbotham testified that the instrument and chloroform were properly used. The jury gave a verdict in favor of the physician. Had this prosecution been sustained it would have been a dangerous precedent. It may, however, serve as a warning to those who discard consultations in operations where counsel may be readily obtained.

One of the most revolting sights which we witness in the streets of New York is a butcher's cart driven rapidly over the rough pavement, with the heads of half-a-dozen live sheep or calves dangling over its sides. We notice that the "Society for the Prevention of Cruelty to Animals" have petitioned the Emperor of France to interdict the employment of living animals for experiments at the Veterinary Schools, and that he has been moved by their appeal to issue the required order. Will they not next use their influence with our City Fathers to suppress a species of cruelty towards animals not less barbarous, and far less excusable, than that of the French Veterinarians?

One of that class of charlatans who disregard all palpable forms of deception, and at once appeal directly to man's love of the marvellous, is just now turning the heads and rifling the pockets of the chronics and cripples of New York. He discards all remedies, and relies entirely upon the touch of his inspired fingers. He is very devout, and is, of course, anxious to use this divine power for the good of his fellows. His door is besieged alike by the poor, and the rich who find ready admittance. Although he has practised his art for several weeks, there is no marked diminution in the number of the incurables, and still the public furor continues unabated, fanned by the daily papers. Such credulity and actual stupidity as are manifested by those who become dupes of this impostor, are humiliating to witness.

A case was recently tried in an interior town, in which the defendant, a quack, was charged with malpractice, in the treatment of disease of the uterus. It was alleged that he was accustomed to diagnose a tumor of the uterus in every case, and that on the first examination he would contrive to introduce, unobserved, a piece of raw meat. He then began to make local applications, and in due time, after much offensive discharge, and no little discomfort, the offending substance would escape, to the great relief of the sufferer. In this case the patient was struck with the resemblance of the tumor to a piece of meat, and took it to a physician, who submitted it to a microscopical examination, when its nature was discovered. The result of the trial was a verdict of $1,000 against the defendant.

Reviews.

I. Hand-Book for the Military Surgeon, War Surgery, etc., etc. By Charles S. Tripler, A.M., M.D., Surgeon U. S. A., and George C. Blackman, Professor of Surgery in the Medical College of Ohio, etc. Cincinnati: Robert Clarke & Co. 1861. 12mo., pp. 121. [With an Appendix of Supply Tables, etc., from the Army Regulations.]

II. A Manual of Military Surgery; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. By S. D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia: J. B. Lippincott & Co. 1861. 18mo., pp. 186.

III. A Practical Treatise on Military Surgery. By Frank Hastings Hamilton, M.D., Late Surgeon Thirty-third Regiment, New York State Artillery; Professor of Military Surgery, and Diseases and Accidents incident to Bones, in Bellevue Medical College; Surgeon to Bellevue Hospital; Professor of Surgery and Surgeon-in-Chief to the Long Island College Hospital; Author of "Treatise on Fractures and Dislocations." New York: Baillière Brothers, 440 Broadway. 1861. 8vo., pp. 234.

(*Continued from* vol. ii. p. 861.)

Prof. Gross's work, though less extensive than Dr. Tripler's, nevertheless takes up in order the more important subjects of the larger treatises. It opens with an Historical Sketch of Military Surgery, then follow sections on the qualifications and duties of the military surgeon; his medical equipments; the nature and treatment of the various gunshot wounds and injuries on the field; military hygiene, etc., etc. This work is in every respect what the author designed it, viz. "a book for emergencies."

The work of Prof. Hamilton takes the rank of a treatise on military surgery, and is evidently prepared with much care and forethought. We shall pass over the introductory chapter, which has already appeared in this Journal; and also the second, which we have already alluded to, as relating to the examination of recruits. In the third chapter the author takes up the all-important subject of hygiene of troops, which he considers under the following heads: Diet, Cleanliness, Dress, and Exercise. In order that the troops may always have a supply of fresh vegetables and meat the desiccated preparations are highly recommended. Intoxicating liquors are now prohibited in the U. S. Army, and tea and coffee substituted.

In regard to cleanliness the author quotes the views of Surgeon Mann, of the war of 1812, who strongly insisted upon its hygienic importance. The remarks of the author on dress are judicious. He very justly condemns the Zouave cap, which affords no protection from the sun, rain, or cold. He insists upon the importance of woollen for the colder seasons. The necessity for urging the importance of exercise exists only during times of peace.

Chapter Fourth is devoted to the management of troops in the field. The author gives the most approved views in regard to the selection of sites, arrangements of the bivouac, tents, barracks, and huts. Illustrations of the different forms of tents are given, and also of the huts and barracks.

Chapter V. is devoted to hospitals. All experience teaches that the scourge of armies is the hospital. Sir John Pringle calls the military hospitals the "graves of the army." Dr. Rush bore the following emphatic testimony against them: "Hospitals are the sinks of human life in an army." This chapter might have been extended to great advantage, for the author has but touched the most important points. We regret to find Professor H. sanctioning the old ideas in regard to the amount of space required for each patient. He quotes Hennen and Ballingall, the former of whom allowed 800 and the latter 1000 cubic feet to each patient. But sanitary science has fixed the amount at not less than 1500 feet, and the new French military hospitals allow 1800 feet. The mortality in larger hospitals is almost entirely due to overcrowding and defective ventilation. We hope to have our own military hospitals, if any are constructed, built upon the most approved plan. Prof. H. quotes at length the opinions of Surgeon Mann, of the war of 1812, and Surgeon McLeod of the war of the Crimea, as to the construction of regimental hospitals.

The three following chapters, VI. VII. VIII., consider respectively:—"Preparations for the Field;" "Management of Troops on the March," and "Conveyance of Sick and Wounded Soldiers." These chapters afford valuable information to those unfamiliar with actual military service. The author has introduced to the notice of the surgeon a Field Case of his own preparation, which is very complete. A variety of litters and ambulances is given, and their uses illustrated.

In Chapter IX. the author takes up the accidents of the battle-field, and gives a very complete summary of gun-shot wounds and their treatment. Professor H. recommends water dressings, and quotes at length from his translation of Amussat's work on the use of "Water in Surgery." The questions growing out of amputations are discussed with the ability of one perfectly master of his subject. We have rarely perused a paper of the same length with more satisfaction, and we refer the army surgeon to it for most judicious advice.

In Chapter XI. the author briefly considers the propriety of employing anæsthetics in military surgery. The following are his conclusions: Anæsthetics are of inestimable value in their effects as remedial agents, and in their power to extinguish sensibility, temporarily, and especially during the performance of severe surgical operations; but we prefer ether to chloroform, as being the least liable to destroy life; and we would never employ either when the system was greatly prostrated by disease, or by the shock of a recent injury, unless the patient exhibited an unconquerable dread of the operation, or the operation was likely to prove exceedingly painful."

Hospital Gangrene is the subject of Chapter XII., which concludes the portion of the work written by **Prof. Hamilton**. The two concluding chapters on dysentery and scurvy were respectively prepared by **Professors Flint** and **McCready**. They present briefly the leading practical facts regarding the causes and treatment of these diseases. The appendix contains information as to the regulations of the army and navy, rules for the preparations of various kinds of food, etc.

The works which we have thus hastily passed in review, were all evidently written to meet an emergency, and are hence more or less imperfect. They, however, we believe, meet a want, which had to be quickly supplied, and have already done much to qualify the new army surgeons for their duties. The publishers deserve our thanks for the promptness with which they have issued them, notwithstanding depression of business.

The Climate and Statistics of Consumption; read before the American Geographical and Statistical Society, by Henry B. Millard, M.D., Member of the Society. New York: Wm. Radde, 1861. pp. 108.

Dr. Millard has furnished a very interesting and instructive little work upon a very important subject. The different facts, which are brought out by means of a careful analysis of a very large number of cases, in a great measure tend to disprove very many opinions which have so long been entertained by the profession at large—these have more particular reference to the influences of climate upon the disease. The whole subject is suitably divided up into chapters, which treat of the prevalence of the disease in connexion with age, sex, occupation, and many other points, which are of great interest to the general practitioner. The author deserves a great deal of credit, not only for the amount of labor expended upon the work, but the concise and inviting style in which it is written. As the result of his labors, he sums up with the following conclusions:

I. That if climate be incapable, *per se*, of generating consumption, it is one of the most powerful agents in modifying and controlling its prevalence.

II. That there are certain varieties of climate inimical to the development of consumption, and of these the most favorable are: 1. Those characterized by extreme and unvarying cold. 2. Those climates characterized by a cool, dry atmosphere. 3. Those which have a very high temperature with but a moderate amount of moisture.

III. That the climates most favorable to the development and existence of consumption are: 1. Those which have a high temperature and a moist atmosphere. 2. Moist climates with a moderate temperature. 3. Climates characterized by great variations in the daily temperature. Finally, with regard to climate, humidity seems most favorable, and dryness most unfavorable to consumption, though a moist salt air is not calculated to develop it.

IV. That the liability to consumption is increased by insufficient exercise, by occupations which require positions that constrict the chest, by impure and confined air, by improper or insufficient food, and by influences which have a depressing effect upon the mind.

V. That a long continuance either of light or darkness will not produce it.

VI. That it is more prevalent on land than on sea.

VII. That it is more prevalent among females than males, and finally,

VIII. That the period of its greatest mortality is between the ages of twenty and thirty years.

We recommend the work as a valuable addition to the literature of the disease of which it treats.

Reports of Societies.

ABSTRACT OF REPORT OF COMMITTEE ON MILITARY SURGERY

TO THE SURGICAL SECTION OF THE NEW YORK ACADEMY OF MEDICINE.

Flannel should be worn next to the skin. The clothing should be light, and should be so adjusted as not to interfere with the most perfect freedom of muscular action. Each soldier should be provided with one or more blankets for protection during the night. The clothing should be washed and thoroughly dried as often as circumstances will permit. From the first of October to the end of May each soldier should be provided with a thick overcoat to protect him from cold and stormy weather. The feet should be covered with stockings and stout shoes with broad soles and low heels. The shoes should not be tight so as to pinch the feet, but they should not be excessively loose. Great care is required with fresh recruits to prevent the feet from becoming sore. If the heel becomes slightly chafed, the part should be at once covered with adhesive plaster. For want of this simple precaution, many soldiers have become disabled, and have thus fallen into the hands of the enemy, and in contests with savages have lost their lives. In hot weather the heads of the soldiers should be protected by means of straw hats, or of Havelocks.

Supply and preparation of food and drinks.

This is a subject of great importance to the health and efficiency of armies, and the neglect of which is apt to be followed by the most disastrous consequences. It is highly important, not only that the supply of food should be ample, but that its quality should be good, and that it should be in such a form that it can be prepared for use as speedily and with as little labor as possible. Hard biscuit or pilot bread may be furnished alternately with soft bread, and care should be taken to prevent the use of any bread of inferior quality. Butter and cheese may be added with the morning and evening meal, on which occasion coffee or tea should also be provided. The coffee which is furnished to the men should be already roasted and ground, so that it can be prepared with little labor. There should always be a sufficient allowance of sugar and milk. Where fresh milk cannot be obtained in sufficient quantities, solidified milk may be used as a substitute. There should be a regular allowance of meat and vegetables at dinner whenever it is practicable to furnish them. Soldiers should not be confined for a long time to salted meat; but fresh meat should always be allowed whenever it can be obtained. The use of fresh vegetables is of very great importance as a means of guarding against scurvy. There are many herbs or weeds growing in the fields and by the roadsides, which can be employed for this purpose when better vegetables cannot be obtained. Thus the French soldiers in the Crimea derived the greatest advantages from the use of dandelion (Leontodon Taraxacum) dressed with oil and vinegar, and eaten as a salad. Fruits should also be provided in their season, either in a fresh or dried state. When fresh vegetables cannot be obtained, their place may be in part supplied by the use of vegetables desiccated in a rarified atmosphere. There seems to be no good reason why soldiers should not be fed as well, under ordinary circumstances, as the better class of laboring men at home. It would be very desirable that there should be at least one good cook for every company of soldiers, as the wholesomeness of their food depends very much on the manner in which it is prepared. Gen. Scott is reported to have said that a man who cannot make good bread is not fit to be captain of a company. An ample supply of good water for drinking and cooking is a matter of great importance to the health and comfort of soldiers. It would be well if every regiment were supplied with a distilling apparatus, by means of which the water of marshes or even of the ocean could be purified. Distilled water, agitated so as to mix with it a sufficient quantity of air, might often be substituted with great advantage for the impure and unwholesome water which soldiers are compelled to drink. Great care should be taken to guard against the excessive use of alcoholic drinks. It would be well for the young men in our armies to make no use of these beverages except when they are prescribed for medicinal purposes.

There can be no reasonable doubt that the health of armies has been in many instances greatly impaired, and that multitudes of valuable lives have been lost in consequence of the insufficient quantity or the bad quality of the food which has been furnished. The errors which have been committed in this respect have sometimes been due to mistakes at headquarters, sometimes to a want of knowledge or of attention on the part of the commissaries of regiments, and sometimes to the knavery of contractors, who have committed wholesale murder by depriving the soldiers of the full supply of good food which they have engaged to furnish, and for which they have received ample compensation. It is not improbable that the Austrian army was defeated at Solferino in consequence of the soldiers being exhausted by long fasting, the Commissary-General having appropriated to his own use the funds which were furnished him for the purpose of providing rations for the army. It is important that the rations of the soldiers should, under ordinary circumstances, be issued daily. When rations are distributed at one time for several days, there is often at first an unnecessary waste, in consequence of which the soldiers afterwards suffer from want, or supply themselves by plunder. With regard to the hard biscuit usually furnished to soldiers as a part of their diet, M. Scrive says, that it should be made thinner and more friable, as by its thickness and hardness it irritates and inflames the gums. M. Scrive also says, that when fresh meat cannot be supplied to the army, it should be replaced by preserved meats and soups; and that salt beef should as far as possible be abandoned as an article of food for soldiers, especially in long campaigns and in distant regions, as it is very apt to become spoiled. Borden's meat biscuit may be a valuable article of diet when fresh meat cannot be obtained. When soldiers have long been confined to the use of salted and smoked provisions, and fresh meat is afterwards liberally supplied to them, they are very apt to be attacked with severe and often fatal dysentery. The precaution should therefore be adopted to furnish to the men at first a very limited supply of fresh meat: the quantity may be gradually increased, as they become accustomed to its use. The dysentery, occurring under these circumstances, is stated by Dr. Hewitt, formerly surgeon in the U. S. army, to be most readily cured by purging with sulphate of magnesia.

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As a means of preserving the health of soldiers, great care should be taken, as far as military necessities will allow, to avoid excessive and exhausting labor, and to allow ample time for sleep. There is no doubt that a large part of the mortality among the troops who were engaged in the Crimean war, was owing to the perhaps unavoidable violation of these rules. The men were engaged in almost incessant labor, and their sleep was very often disturbed, while, at the same time, they were exposed to the heat and cold, rain and snow, with very insufficient protection. Whenever it is necessary to have a large amount of labor performed, it is better, if practicable, to hire laborers, than to require an excessive amount of work from the soldiers.

Under the head of military therapeutics, are to be considered the preparations which are required for the practice of medicine and surgery under the peculiar circumstances attending the movements of armies, and the actual treatment of diseases and injuries occurring under those circumstances. In laborious marches, in obstinate and protracted sieges, in sudden and unexpected assaults, in severe and bloody engagements, the military surgeon is called in rapid succession to the treatment of large numbers of sick and wounded soldiers. There is no time for calm deliberation and careful preparation: he cannot send his prescriptions to an apothecary, nor can he send to a manufacturer for new instruments or apparatus. The few medicines, instruments, and dressings which he requires, must be at hand, or his patients must be deprived of the benefits which they would have derived from them. A wise foresight must therefore be exercised in providing such materials as are indispensable to the care of the sick and wounded, and in conveying them to every place where they may be needed. All bulky and heavy articles, which are not absolutely essential, should be dispensed with, on account of the difficulty and delay in conveying them from place to place. The best way of conveying the apparatus of an army surgeon, is a box-cart similar to those which are often used by pedlars. In going over a country too rough for wheel carriages, a pair of panniers slung over the back of a horse or mule is the best substitute for a cart. The weight of the panniers with their contents should not exceed 200 lbs.

Each surgeon should be provided with a case of amputating and trephining instruments, with scalpels, bistouries, lancets, and other instruments for minor operations. He should always have about his person a good case of pocket instruments, and a canteen containing wine or brandy and water, ready to be used as a cordial in any case of emergency. He should also carry in his pocket a phial containing pills of opium. In the cart or panniers containing his apparatus, there should be a supply of sponges, bandages, lint, tow, cotton batting, old linen or muslin for compresses, ligatures, tin basins, splints, adhesive plaster, pins, needles, matches, candles, catheters and bougies, a stomach-pump, an enema pump, and a suppository syringe. There should be a dozen tourniquets, and the orderly men, who act as assistants to the surgeon, should be instructed in their application. There should also be a supply of anæsthetics and of medicines suitable to the emergencies of military life. On the field of battle, each surgeon should be immediately followed by an orderly man, bearing a knapsack, containing a few of the most indispensable instruments and dressings for immediate use. Previously to an engagement, a certain number of men from each company should be deputed to take charge of such soldiers as may be wounded, and to remove them at once to a place of safety in the rear of the army. For this purpose, litters should be at hand, made of stout canvas with stretchers, and provided with rings, into which bayonets or poles may be inserted. Ambulance carts should also be brought as near as possible to the scene of the engagement, and the wounded soldiers should be speedily deposited in them, and driven off to the place selected, where they may receive proper surgical attention.

The U. S. Army medical board recommend that the following schedule of transports for the sick and wounded, and for hospital supplies, be adopted for a state of war with a civilized enemy:

"For commands of less than three companies, one two-wheeled transport cart for hospital supplies, and to each company, one two-wheeled ambulance.

"For commands of more than three and less than five companies, two two-wheeled transport carts, and to each company, one two-wheeled ambulance.

"For a battalion of five companies, one four-wheeled ambulance, five two-wheeled ambulances, and two two-wheeled transport carts. For each additional company, less than ten, one two-wheeled transport cart.

"For a regiment, two four-wheeled ambulances, ten two-wheeled ambulances, and four two-wheeled transport carts."

Also, "that horse-litters be prepared and furnished to posts, where they may be required for service on ground not admitting the employment of two-wheeled carriages: said litters to be composed of a canvas bed similar to the present stretcher, and of two poles, each sixteen feet long, to be made in sections with head and foot pieces, constructed to act as stretchers to keep the poles apart."

Also, "that the allowance of hospital attendants for a regiment in the field be, for one company, one steward, one nurse, and one cook: for each additional company, one nurse: and for commands of over five companies, one additional cook."

The Army Board also recommend hospital tents of the following dimensions. "In length 14 feet; in width 15 feet; in height (centre) 11 feet, with a wall of 4½ feet, and a fly of appropriate size. The ridge pole to be made in two sections, and to measure 14 feet when joined." The Board contemplate that such a tent will accommodate 8 to 10 patients comfortably. It is evident, however, that the space allowed for each patient is altogether too small, amounting to only a little more than 160 cubic feet for each patient.

In making arrangements for the care of sick and wounded soldiers, there should be hospital tents erected as near as possible to the field of battle, so that dressings, and operations which are urgently required, may be performed without any unnecessary delay. There should also be regimental hospitals, which may be constructed as tents, huts, or more permanent buildings, according to the season of the year and the character of the military operations. Each regimental hospital should have accommodations for fifty to one hundred patients. There should also be general hospitals at the base of operations, and in these there should be ample accommodations for all the patients which may be sent to them from the regimental hospitals, or directly from the camps or the battle-field. The regimental and general hospitals should contain sufficient space to allow not less than eight hundred cubic feet of air for each patient. The horizontal space should be not less than 6 × 6 feet for each patient. Large public buildings, such as churches, concert-rooms, and public halls, are commonly employed as general military hospitals. It is often necessary to make extensive alterations to adapt them to their new use. Special regard should be paid to ventilation. The doors and windows usually require to be enlarged, especially in an upward and downward direction; or numerous holes six inches square may be made through the walls near the floors and ceilings. There should be doors and windows opposite to each other, so as to allow the air to pass freely through in all directions. The patients should not be placed in stories below the level of the ground, or but slightly raised above it, as experience has shown that the upper stories are much more salubrious. The beds should be raised from the floor, being placed on iron bedsteads whenever they can be obtained. No two bedsteads should be in contact, and none should touch the walls of the room.* No unnecessary articles should be in the wards, as they occupy valuable space, and absorb noxious vapors. Care should be taken that the windows do not open upon any receptacles of foul air. Besides the principal hospital buildings there should be small detached houses reserved for special cases. Near the entrance of the town some building or tents should be selected as a receiving hospital, where the wounded should be brought and properly cleansed, wounds dressed, and suitable hospital clothes provided; and then they should be forwarded to the permanent hospital. Great attention should be paid to privies and drains connected with the hospital, to prevent them from contaminating the atmosphere. Patients who are able to rise from their beds should eat in adjoining rooms or tents. The wards of the hospital should be divided into three classes, viz. surgical, medical, and convalescent. To every division of one hundred beds there should be at least one ward superintendent and six orderly men. When the hospital is prepared, the compound fractures should be placed in the most accessible wards, and injuries of the same character should be placed in the same wards. When wine or spirits are directed, the surgeon should see them administered. To preserve the purity of the air, the wards should be frequently whitewashed with lime. The adjacent grounds should be well drained, and the sewers should be frequently flushed. Excretions should be as soon as possible removed from the wards. The temporary hospitals attached to camps are subject to terrible mishaps. Bazancourt speaks in the following terms of the effects of a hurricane upon the frail structure used as a military hospital by the French army in the Crimea: "The ambulance barracks are shattered by the fury of the wind; and whilst their roofs, carried up in the air, whirl around and disappear, the broken timbers fall upon the wounded and the sick, whose beds are overturned into the pools of rain which inundate them. Most of the patients are unable to move, being quite prostrated by illness, or by severe wounds, and lie waiting with resignation that which the will of God may determine respecting them."

In the French army in the Crimea each ambulance for ten thousand men had three caissons, containing materials for six thousand dressings, and eighteen complete tents. Flying ambulances on mules' backs were provided for regions where carriages could not go. As an example of the manner of taking care of the wounded during and after an engagement, your Committee presents the following directions given by M. Scrive to the medical officers of the French army in June, 1855: "At the ambulance of the trenches shall be assembled before the battle the non-combatant soldiers—the musicians of the regiment for example, with the infirmary men disposable in the different services. One or several officers of administration will direct them in the trenches to take up the wounded, and transport them to the ambulance. An officer of administration, having a fixed position at the ambulance, will attend to placing the wounded, on their arrival, in an order always the same, and determined beforehand to avoid confusion. The visits to the wounded shall be made by one or more surgeons, assisted by two or more infirmary men carrying dressings, &c.; one of these last will inscribe the name of the patient, his regiment, and his matriculated number. The surgeon will determine whether the wound requires to be dressed immediately, or if the patient can be at once transported to the ambulance of the division. In the first place, the wound may be dressed on the spot, or if an immediate operation is required, the patient may be conveyed into the operating room. After the dressing or operation, the patient may be placed upon the litter or ambulance cart. Where four to six wounded persons are ready, they shall be conveyed together to the ambulance of the division; and in these little successive journeys, the muleteers, under the direction of an officer commanding the train, shall betake themselves to the ambulance, whose number shall have been designated by the military sub-intendant or his aid, who shall mark upon the list of vacant places, at the different stationary ambulances, the names of the wounded whom he will send there successively. In this manner the exact situation of the ambulances will be precisely known. When the wounded are very numerous, no operations shall be performed, excepting those which are absolutely necessary. One third of the surgeons shall be constantly occupied in visiting the wounded, and judging as to the necessity of immediate operation or dressing, especially when the number of the wounded is large; the remaining two-thirds shall attend to the necessary operations and dressings, following, except in cases of great urgency, the order of arrival and the rank of the patient. In the ambulance of the trenches, the services of the infirmary men may be conveniently divided in the following manner: two infirmary men for each surgeon engaged in dressing; two infirmary men for each surgeon on his visits—one to write, and the other to assist the patient to get on the litter; four infirmary men for an operating table; and, finally, eight to twelve infirmary men engaged as porters, to attend to the transportation of the wounded. It is very important to prevent the crowding of the ambulance of the trenches by soldiers whose aid is not required. A guard should therefore be placed at the door to prevent such persons from entering. In the ambulance of the division, on the day of battle, two surgeons should be on duty to receive the wounded coming from the trenches, and to examine minutely each wound. They shall make a definitive dressing in cases where an immediate operation is not indicated."

The general practice of the French surgeons in the Crimea was to extract foreign bodies from wounds at an early period, whenever they were easily accessible. The most efficient styptics in arresting hemorrhage, where the blood-vessels could not be conveniently tied, were the perchloride and the persulphate of iron. Amputations were generally resorted to in severe injuries of the limbs, and the results were more favorable than when conservative surgery was attempted. Primary amputations were much more successful than secondary. Scrive makes an exception to this rule in the case of amputation of the hip-joint. Nine primary amputations at this joint were performed by the French surgeons in the Crimea, and in all death took place within a few hours after the operation. There were three consecutive amputations at the hip: the patients severally lived five, twelve, and twenty days. Resections were generally fatal, except in the upper extremity. Scrive remarks, that when amputation was performed a day or two after an injury, it was much more difficult to induce anæsthesia than when the amputation was performed on the same day. The amputations were as follows: hip, 12; thigh, 1,512; knee, 58; leg, 915; foot, 241; toes, 220; shoulder, 168; arm, 912; elbow, forearm, and wrist, 278; hand and fingers, 282. The average dressings for each patient were: of linen, 2,482 grammes; roller bandages, 891 grammes; charpie, 1,181 grammes. The weight of dressings during the campaign amounted to 196,000 kilogrammes. (A gramme is about 15 grains; a kilogramme 2 lbs. 8 oz. troy weight.) Average number of dressings for each wounded person, 35; total number of dressings, 1,400,000. Number of surgeons wounded by the fire of the enemy and by the explosion of magazine, 19. One died in consequence of his wounds. The labors of the surgeons were excessively severe. Each surgeon, on an average, was obliged to visit daily more than one hundred patients. Eighty-three French army surgeons died during the war. It is very evident that the amount of labor thrown upon the medical officers of the French army was unreasonably great, and that the number of these officers should have been largely increased. When an army is called into active service, and is exposed to pestilential diseases and to bloody engagements, a much larger amount of medical service is required than can be reasonably expected of a surgeon and an assistant surgeon to each regiment.

Your Committee does not consider it necessary to enter into the details of the treatment which is required in gunshot wounds, and in other injuries to which soldiers are exposed, as these subjects are treated at considerable length in the text-books of surgery, which are in the hands of most of our practitioners. There are, however, some practical lessons to which a passing allusion may be made with advantage. When the attention of an army surgeon is first directed to a number of wounded persons, who have been brought from the field of battle, it is important to determine the order in which his services should be rendered to them. In order that the greatest amount of effectual relief may be afforded, certain rules may be laid down for the guidance of the surgeon under these trying circumstances. The cases to which the first attention of the surgeon should be given are not those of so severe a character as to be almost necessarily fatal, nor, on the other hand, those which are comparatively slight and unattended with danger. But his first attention should be directed to injuries which are severe and dangerous, but which at the same time afford a good prospect of recovery. The cases most urgently requiring immediate treatment are those in which there is alarming hemorrhage, the source of which is not beyond the reach of surgical skill. The cases next in order of urgency are those in which, from the shock of the injury, there is more or less prostration, requiring the use of cordials and stimulants. Then come the cases of compound fracture, some of these requiring amputation or resection, and others mechanical support to prevent distortion and the irritation arising from muscular spasm, causing spiculæ of bone to penetrate the soft parts. Next in order come the slighter cases of injury of the viscera, always attended with danger, but not necessarily fatal. After disposing of those cases which are more or less hopeful, the surgeon may direct his attention to the comfort and relief of the more severe injuries, in which a fatal result is almost certain to ensue. And lastly, he may attend to the minor operations and dressings in cases of injury which are not regarded as dangerous to life.

The result of primary amputations at the hip-joint is so uniformly disastrous, that, in the opinion of your Committee, these operations should be discarded from military surgery. If the patient should in any case recover from the shock of the terrible injury which seems to require so formidable an operation as amputation at the hip-joint, the operation may be performed consecutively with better prospect of success, without diverting the attention of the surgeon, at this period, from a more hopeful class of cases.

There is another subject which your Committee would bring to the notice of the surgical section of the Academy, viz. the injurious consequences resulting from the hasty removal of the sick and wounded by a discomfited and retreating army. Under these circumstances, your Committee would suggest the expediency of leaving the sick and wounded, with a sufficient number of medical attendants, to fall into the hands of the enemy as prisoners of war, in all cases in which there is a large number of patients whose lives would be greatly endangered by the removal, and in which reliance could be placed on the magnanimity of the victorious party. There might be a previous understanding between the belligerent parties, that hospital buildings, or tents, so abandoned, and surmounted by a flag of truce, or some other preconcerted signal, should be safe from attack.

All which is respectfully submitted.

ALFRED C. POST, M.D. } *Committee.*
WM. H. VAN BUREN, M.D. }

NEW YORK, *June* 21, 1861.

Correspondence.

COMMISSION OF LUNACY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—At the annual meeting of the Oneida County Medical Society, held in this city last Tuesday, July 9th, Dr. Coventry, Chairman of the Committee appointed at the last meeting of the Society to petition the Legislature on the subject of a Commissioner of Lunacy, made a verbal Report "that in accordance with the instructions from the Society in 1860, a petition was presented from this Society, asking the Legislature to appoint a Commissioner of Lunacy, whose duty it should be to examine into the condition of the insane confined in the poor-houses, almshouses, &c., in the state, and report their condition to the Legislature at its next session. No legal, judicial, or other powers, except simply that of examination, were asked to be conferred on such commissioner. It was, it is true, thought that such commissioner might be called as an expert witness in cases of insanity, but it conferred no power over any intelligent medical practitioner. The chairman of your committee, who was also chairman of a similar committee in the State Medical Society, made a report to the latter body, recommending such appointment. The report was accepted, and a committee was appointed to confer with the committee of the Senate, to whom the previous petition had been referred. The committee failed in obtaining a conference with the Senate committee. Subsequently a bill was introduced into the Senate, ostensibly for the same purpose, but differing entirely from the one originally contemplated.

"In the winter of 1861, your committee, in accordance with instructions, again petitioned the Legislature. A committee was also appointed by the State Medical Society, to confer with the committee of the Senate. A bill had already been introduced into the latter body, and although it differed from what was originally contemplated, was, with some modification, adopted, as most likely to succeed. The bill, as amended, passed the Senate by a large majority, and was sent to the Assembly. For some reasons unknown to the committee, instead of being referred to the medical committee, or the Committee on Charitable Institutions, or on Poor-houses, it was referred to the Judiciary Committee, where it was permitted to slumber the remainder of the session. There was ample time for action, had it been desired, and it is difficult to conceive what could have been the objection to a measure so benevolent in its objects, and so loudly called for by suffering humanity. It is well known that in many of our alms-houses, the helpless victims of insanity are treated in a manner which is a disgrace to a civilized or Christian community; yet the Legislature of the great State of New York refuses the paltry consideration of paying a competent person for examining into their condition. Your committee believe the question is one too important to be permitted to be strangled in this summary manner, without even an investigation. Twice, not only has this County Society, but the Medical Society of the state, urged upon the Legislature the subject, but in vain. Your committee would therefore recommend that you go back to the original object of the petition, viz. to appoint a single Commissioner of Lunacy, without other legal or judicial power, and that the appeal be made, not to the Legislature, but to the people, who are the source of all legislative power. Your committee believe that it is only necessary to let the people know that more than two thousand of their fellow citizens, not guilty of any crime, but the unhappy victims of disease, are shut up in dens and out-houses, often chained to the floor, without any care or protection from the State, to arouse a feeling of indignation which would command their servants to remove this disgrace from the State."

A committee was appointed, with Dr. Coventry as chairman, for the same purpose as the one appointed last year, and also to present to the meeting a Resolution, expressing the action of the Society, which was unanimously adopted, as follows:

"Resolved, that the Committee address a circular letter to members of the profession in the different counties, together with a form of petition to the Legislature, urging the members of the profession, and the County Societies, to circulate the petition for signatures; asking the Legislature to appoint a Commissioner of Lunacy, who shall examine into the condition of the insane, confined in poor-houses, alms-houses, and jails."

Chas. L. Hogeboom, Sec'y.

Utica, *July* 13th, 1861.

Army Medical Intelligence.

APPOINTMENTS.

Missouri Regiments.—1st Regiment American Zouaves, Surgeon, Bowman H. Peters; Assistant Surgeon, John R. Bailey.

Massachusetts Regiments.—17th Regiment, Surgeon, Isaac F. Galloupe. 20th Regiment, Surgeon, Henry Bryant. 5th Regiment, Surgeon, Wm. W. Kean, in place of H. H. Mitchell.

Naval Medical Board.—The Naval Medical Board, composed of Surgeons Barrington, Lockwood, and Wheelwright, and Passed Assistant Surgeons Taylor and Recorder, continue their sessions at the Naval Hospital. To this date the following gentlemen have passed a successful examination, and most of them have received appointments as Assistant Surgeons. They are named in the order of reporting:

S. D. Flagg, jr., New York; Charles H. Covell, New York; J. H. Gotwold, Pennsylvania; F. E. Potter, New Hampshire; A. C. Rhoades, New York; A. Matherson, Connecticut; A. O. Leavitt, New Hampshire; J. R. Little, New York; G. S. Beardsley, New York; J. O. Burt, New York; W. C. Lyman, Massachusetts; Newton L. Bates, New York; Edward S. Bogert, New York; Adrian Hudson, Canada West; Wm. C. Wheeler, New York; Ed. Mathews, New York; John Wilson, Pennsylvania; Thos. H. Whiting, New York; A. B. Judson, Pennsylvania; N. R. Richardson, Maine; Wm. Howell, New York; Walter K. M. Wells, Massachusetts; Jas. H. Guterham, New York; Henry Ackley, Pennsylvania; Mich. Bradley, Pennsylvania; A. W. H. Hawkins, Pennsylvania; Alex. Hutchins, New York; Walter P. Dick, Pennsylvania.

Presentation to a Surgeon.—The friends of Surgeon Joseph Thoburn of the First Virginia Regiment, presented to him a hat, belt, and sword, on his leaving his home in Wheeling, Va., to join his command.

FORTRESS MONROE.

[Special Correspondence of the American Medical Times.]

This division of the army has been highly favored, from a medical stand-point, as to its hygienic location, and besides from the fact of its having so excellent and so experienced a medical head, in Dr. **John M. Cuyler**, the senior surgeon and Medical Director of the Department of Eastern Virginia.

The forces encamped in the Fort and its vicinity, amounting to about twelve thousand men, have been very generally healthy, with the exception of the usual diarrhœa, to be expected from a change of climate and partial change of diet, added in some cases to the effects of a sea voyage.

The First Regt. Vermont Volunteers were unfortunate; while on their passage hither the measles began to prevail, and after their arrival the disease spread rapidly among them. This occurred about the middle of May. This invasion of rubeola gave rise to the ridiculous rumors of the prevalence of small-pox among our troops. There have been no authenticated cases of variola in this division of the army. Dr. **Eisenlord**, of the Seventh N. Y. Vols. (Col. Bendix), had two cases about June 20th, which he at first thought to be varioloid. The First Regiment Vermont Volunteers had, during the last month, 121 cases of measles alone; all but two of which, however, convalesced satisfactorily. These two lapsed into a typhoid condition and died.

Aside from the ordinary acclimating diarrhœa and dysentery, the following have been the leading diseases as shown by the condensed report of the whole division for the month of June, 1861:—Incised, contused, and lacerated wounds, 100; gunshot wounds, 37; rubeola, 121; rheumatismus acuta and chronica, 156; constipatio, 152; colica, 85; bronchitis, 88; gonorrhœa, 91; cholera morbus, 74; malarial fevers, 68; other fevers, 46. Making the total sick, otherwise than from diarrhœa and dysentery, 2034. The health of the division is good now, there being but 518 on the sick report in all. The U. S. Genl. Hospital, under the care of Dr. Cuyler, is in good working condition; there is everything prepared for a much greater number than are at present treated there (viz. 120). It will easily accommodate 300 to 400 patients. This hospital is situated in the famous Hygeia Hotel building. The hotel has often accommodated in the summer season as many as 600 guests. On May 25th, Dr. Cuyler took the building, and at once commenced the organization of a new hospital. It had been occupied as quarters by the troops and was very dirty, but speedily under the hands of a large gang of "contrabands" it was made a very clean and commodious hospital. At that early period we were much embarrassed by the lack of hospital furniture to supply our need, till the ample supplies then on their way, sent by Government, should arrive; but we were enabled to hire sheets, etc., etc., from the hotels, temporarily. At the time of the Great Bethel affair, the hospital was in full supply and operation (10th June, 1861). The wounded were brought in hospital wagons, and Dr. **Cuyler** operated where required and dressed the wounds, assisted by Drs. J. S. **Smith** and C. B. **White**, U. S. A., Dr. R. B. **Mokay** of Penn., Volunteer Surgeon, and by Drs. **Hoff**, **Gilbert**, and others, of the Regimental Surgeons. From the Big Bethel action, we had brought in twenty cases of gunshot wounds, and about five bayonet and incised wounds.

Of the gunshot wounds one survived only a few hours, the ball entered the abdomen, perforated the bladder, and lodged in the pelvis; one shot through the chest died at nine P.M. of the 10th; another shot through the body, died ten days after of secondary hemorrhage.

There were also two cases of great interest, being gunshot wounds of the thighs, and fracture of the femur, one through its middle, the other just below the hip-joint. On consultation, it was decided not to amputate. The first (James Garbett, of the Third N. Y.) is doing admirably. Union of the femur is becoming firm, treated by extension and fenestrated splints; now has on Buck's apparatus.

The other, where the trochanter was shattered, is doing well. We expect to save him. He is certainly as well as he would have been if amputation had been performed at the hip-joint. The following case is of interest: C. Gauth, Seventh N. Y. Vol., had a superficial gunshot wound of the epigastrium and left hypochondrium, evidently producing concussion of the subjacent parts, as he has been deeply jaundiced; he had vomiting, and has been very feeble. He is now slowly improving. There were four amputations performed within a few days of the action (two immediate), three of the forearm and one of the arm; all doing well.

Then there have been seventeen cases of gunshot wounds, received in skirmishes and by accidents. Of these only one died, G. S. Gillies, Tenth Regt. N. Y. Vol. Shot in the abdomen, when on picket guard, on June 15th, by the mistake of a comrade. He died thirteen hours after.

The following summary may be useful:—Gunshot wounds, 37, of whom 14 died; fractures, 7; dislocations, 3; incised, contused and lacerated wounds, 100. In the Fort Monroe Garrison Hospital we have had three incised and punctured wounds from civil practice. And of military surgery; a sailor of the Harriet Lane, calf of leg badly torn by splinters, recovered so as to be sent to his ship almost well; about June the 28th, the quartermaster of the Monticello, Mr. Peterson, shot in the abdomen (in the Rappahannock river affair), survived only thirty hours. Dr. Heber Smith, the Surgeon of the Monticello, shot through the face and right hand, I attended upon, at my own quarters in the Fort, since gone home on leave, having recovered to a great degree.

This department is now well supplied with ambulances. These are of various contrivance for the comfort of the wounded, as regards interior fixtures. They are of two kinds, the light two-wheeled, for short excursions and field use in gathering up the wounded and carrying them short distances; and the large four-wheeled ambulance, with seats for those able to sit up, and mattresses for the badly wounded to lie down, racks for muskets, knapsacks, etc. One or more of these go twice daily to the various camps to bring in sick and wounded to the hospitals, and carrying out medical stores and convalescent men. These are admirable; use proves them to be very comfortable for even the very painfully wounded.

Charles B. White, M.D.,
Assistant Surgeon U. S. A., late House Physician to Bellevue, N. Y.
Fort Monroe, *July* 12, 1861.

Legislation in Connecticut.—A correspondent requests the insertion of the following sections from the Act which passed the Legislature of Connecticut relating to surgeons in the volunteer army:

> Sec. 6.—The Commander in Chief may, at his discretion, appoint for the militia of this State in the service of the United States, a Surgeon for each Brigade, and a Surgeon and one or two Assistant Surgeons for each regiment, who shall be subject to the regulations prescribed for Surgeons in the Army of the United States, and entitled to the same compensation; and in case any Surgeon so appointed shall not be paid by the United States, he shall be paid from the treasury of this State, at such time and in such manner as the Commander in Chief shall direct.
>
> Sec. 7.—The Commander in Chief is hereby authorized to appoint a Medical Board consisting of not less than three physicians, whose duty it shall be to examine into the qualifications of all applicants for the office of Surgeon or Assistant Surgeon; and no person shall be appointed to either of said offices, except upon the recommendation of said Medical Board or a majority of them.

Health of the Army in Western Virginia.—It was stated, July 5, that there had not been a death in General McClellan's army since it left Ohio.

Dental Department of the Army.—The New York *Dental Journal* for July contains the following plan for a Dental Department of the Army:

1st. The *Dental Surgeon-General*, appointed by the Secretary of War, and reporting annually to him; having power to appoint *Dental Inspectors*.

2d. A board of three competent dental surgeons, entitled the "*Board of Dental Surgeons*," whose duty it shall be to examine applicants for appointment as *Dental Surgeons* and *Assistant Dental Surgeons*, such applicants to be designated by the Secretary of War, and only to receive their appointments when declared duly qualified by the board; the said board to be appointed by the Secretary of War. The same board to examine candidates for promotion.

3d. *Dental Inspectors*, to be appointed as before mentioned. Their duties to consist of a careful inspection quarterly, of all soldiers belonging to the posts to which they may be attached, and an exact report after each inspection to be made to the Dental Surgeon-General. One inspector to be attached to every post comprising not less than two, and not more than four regiments, their numbers being increased in that ratio.

4th. *Dental Surgeons*, of whom there should be one attached to every regiment; application to be made through the Secretary of War. It should be the duty of these officers to regulate and generally attend to the teeth of his regiment; extracting, filling, regulating, treating, &c., as cases might present themselves. He should keep a book containing a perfect roll of the regiment, and designating by means of diagrams the condition of the mouth of every man in it. He should exhibit this book as his report, quarterly, to the *Dental Inspector*. He should be assisted by,

5th. The *Assistant Dental Surgeon*, to be appointed as aforesaid, whose duty it should be to aid the Dental Surgeon when required, and report to him the progress of all cases under his charge. Applicants for this appointment should be between the ages of twenty-one and twenty-eight years of age; after serving five years, they should be eligible for promotion, after submitting to careful examination by the Board: if they decline examination, or are found wanting, morally or professionally, their names should be stricken from the United States service.

The supplies for the "Dental Department" should be furnished, as in the "Medical Department;" the Dental Inspectors drawing for all medicines and other materials necessary for the proper prosecution of the duties of the Dental Surgeon, and distributing them to the dental surgeons of each post. The pay of the Dental Department to be regulated by that of the "Medical Department."

Medical News.

Death of Charles Lever.—This distinguished novelist died at Spezzia a few weeks ago. He was educated as a physician, and practised with great success in Londonderry when the Cholera first prevailed.

Chicago Charitable Eye and Ear Infirmary.—From the Third Annual Report it appears "That during the year ending May 1, 1861, *two hundred and eighty-eight* patients have been under treatment; namely: *two hundred and thirty-seven* with diseases of the eye, and *fifty-one* with those of the ear; making an aggregate of *five hundred and eighty* that have been treated since the opening of the Infirmary, three years since."

Antagonism of the Poisoning Effects of Strychnine and Curare.—We have previously noticed experiments on this point made by Dr. Vella of Turin. The author has shown that the curare destroys the effects of a dose of strychnine which would produce death when taken alone into the stomach or when injected into the veins. For by exhibiting together the curare and the strychnine, either separately or previously mingled, far from increasing the poisonous action of these substances, it is possible to neutralize them and cause their effects to disappear. The two substances do not exercise any chemical action upon each other, from whence it appears that the antagonism of their poisonous effects results from action wholly physiological.—*Am. Jour. Sci. and Arts.*

Original Lectures.

A COURSE OF LECTURES ON CHANCRE,

DELIVERED AT THE BALTIMORE INFIRMARY.

BY

WILLIAM A. HAMMOND, M.D.

PROFESSOR OF ANATOMY AND PHYSIOLOGY IN THE UNIVERSITY OF MARYLAND, SURGEON TO, AND LECTURER ON CLINICAL SURGERY IN THE BALTIMORE INFIRMARY.

Lecture IV.

Gentlemen:—We have heretofore only considered one species of venereal ulcers, the soft, non-infecting chancre, and the accidents to which it is liable. We have seen that this variety is altogether a local disease, causing no constitutional affection except, under certain circumstances, the excitement or debility which may attend all long continued or severe local diseases. You have witnessed the truth of this assertion in the frequent examples of soft chancre which have been, or are now, in the house. Many of them have lasted a long time, yet in not a single instance has there been the least manifestation of constitutional syphilis.

We have seen, too, that the complications to which the soft chancre is liable, are exceedingly important, and are really more to be dreaded than the original affection. Yet these complications are altogether local, never causing constitutional syphilis, and therefore never converting the non-infecting into an infecting chancre.

It has also been pointed out to you, that as the soft chancre is a local disease, the treatment must be mainly local, and that it consists chiefly in destroying its specific character by escharotic substances. I shall not recall to your minds the details which have already been fully brought before you. They have been doubly impressed upon you from the examples in which you have seen them carried out.

But, gentlemen, we come now to a chancre of a far different character: the indurated chancre, the infecting chancre, the true syphilitic chancre, the chancre *par excellence*. It is the indurated chancre, because it alone possesses a true indurated base; it is the infecting chancre, because it alone poisons the system; it is the syphilitic chancre, because it alone causes syphilis; and it is the chancre *par excellence*, because it alone possesses all these characteristics which I have mentioned; characteristics which have caused it to be studied by the most eminent men in the profession; which have rendered it a terror to mankind, and which have therefore placed it high in the pathological scale above its more humble congener.

What do we know of the history of this chancre? Not much, previous to Hunter's investigations, although there is no doubt but that induration had been noticed by syphilographers before Hunter directed attention to this circumstance. It is, however, so generally associated with this great physiologist's researches, that the indurated chancre is frequently known as the Hunterian chancre.

Without stopping to dwell upon the opinions and experiments of intermediate writers, we come to those of our own day, and first among these we find M. Ricord. In spite of his many unsustained theories, and notwithstanding his dogmatism and vacillation, we cannot hesitate to award to him the most exalted position among syphilologists. He, following the course which Hunter had indicated, excelled him in the number and variety of his experiments, and drew from them deductions which, if not always correct, have constituted the study of venereal diseases a science at once philosophical and beautiful.

Ricord has always insisted upon the importance of induration, and though for many years holding to the doctrine of a single syphilitic virus, he has long taught that induration and constitutional infection were most intimately related. He thought, however, that the induration was caused by other circumstances than a distinct and specific virus.

But I will not detain you now with the discussion of the views which Ricord and other syphilographers hold, as I propose to enter more at length into this subject in another lecture. I shall therefore at once proceed to point out to you the characteristics of the indurated, or infecting chancre.

Like the simple chancre, the indurated chancre has its period of incubation; from the fourth to the fourteenth day being the period after connexion during which it generally makes its appearance. The average time is about the fifth day. A gentleman who was under my charge a short time since for an indurated chancre of the frænum, assured me that it did not show itself till the end of the sixth week after any connexion. A similar case is related by Hunter, but it is not so well authenticated as the foregoing. Such instances, however, are altogether exceptional, and unless you know that your patient has no motive for deception, you should be careful how you believe any statement of lengthened incubation.

An indurated chancre may appear either as a pustule or an excoriation, under the same conditions which I have pointed out when treating of the simple chancre. If the epidermis is intact, you have it originating as a pustule; if it is abraded, you have the excoriation. Up to the period of induration, there is no essential difference between the chancre under consideration and the non-infecting variety. This pathognomonic sign, this necessary accompaniment of the infecting chancre, makes its appearance ordinarily about the fifth day. According to my experience, this is the most usual period. Ricord puts it somewhat later, assuming the third day as the earliest time for the manifestation of induration. Now I am sure I have seen induration appear before the third day. I have several times seen it present from the very first, under circumstances where no doubt could exist in regard to the matter. In the army, soldiers who have anything suspicious about their genital organs, make their appearance at the hospital at the earliest practicable moment. It is often possible, also, to fix the exact period of connexion; and therefore, as you perceive, certainty can frequently be arrived at in venereal diseases, in regard to points which, in civil practice, are difficult to elucidate. But I shall, I am sure, impress the fact of the very early occurrence of induration more forcibly upon your minds, by giving you the particulars of a case in point, which I select from five similar ones, of which I have the notes.

An infantry soldier came to me, complaining of an itching of his penis. At the time, the command with which I was on duty, was marching from Laguna, New Mexico, to Doña Ana, in the same Territory. The evening previous to the soldier applying to me, we had encamped on the outskirts of a small town, Las Lunas, and the man informed me, in answer to my question, that he had then and there had sexual intercourse with two Mexican women. Upon examining him carefully, no pustule or abrasion were to be perceived. The itching, however, was very annoying, and was felt immediately in the centre of the frænum. I directed it to be covered with simple cerate, and ordered him to come again at the expiration of twenty-four hours. He did so. A pustule was then commencing to form, and upon feeling the base, I had no difficulty in detecting well-marked induration. I allowed the sore to go on, simply dressing it with a weak solution of sulphate of zinc. It ulcerated in the usual way, a well-marked indurated chancre being produced. Mercury was given internally. On the fifth day a swelling appeared in the groin, and a fully developed indurated bubo was the consequence. I was separated from this detachment soon afterwards, and lost sight of the man for several months. I saw him once subsequently. The chancre had healed, but he had well-marked syphilitic sore throat and skin eruption.

Now, the points in this case which are important are—

First. The short period of incubation, thirty-six hours only elapsing till a well formed pustule was developed, and

Second. The appearance of the induration synchronously with the pustule.

There can be no doubt either in regard to the exact period of connexion, as the man had no opportunity for having sexual intercourse for twelve days before he was infected, and I ascertained positively that he had not availed himself of the privilege at that time.

As to the induration preceding the pustule or excoriation, I have only to say, that I have never seen it, without, however, presuming to deny, as does Ricord, that such an occurrence ever takes place.

Now, in regard to the character of this induration, it is in general so well marked that in ordinary cases you will rarely run any risk of mistaking it for anything else, after you have become, by experience, familiar with its feel. Take hold of a chancre possessing this characteristic with the thumb and forefinger pressing against its opposite edges, and you will experience, ordinarily, a sensation as if a split pea (to use Bell's very excellent simile) is placed immediately under it. The induration does not extend beyond the base of the chancre; it is perfectly abrupt and circumscribed. This is one form, and the most common under which induration appears; but there is another, particularly important on account of the delicacy of touch which may be necessary for its discovery. Ricord calls this the parchment induration, and the term expresses very exactly the character of it. It feels precisely as if a piece of parchment is placed directly under the floor of the chancre, and extending to its circumference. It requires some tact, at times, to detect this variety of induration. You will recollect that in speaking of the soft chancre, I mentioned to you that an appearance of induration might sometimes be present, owing to various other causes than specificity. The soft chancre may have hardness at the base from phlegmonous action, or from the effects of astringent or caustic washes, or from the cicatrix which forms around it as it heals. The first of these differs from the specific induration in the fact that it extends beyond the base of the chancre, and is not abrupt; the second differs from induration in the feeling which it communicates to the fingers, but which feeling cannot be explained in words, and can only be learned by experience; it soon disappears when the applications which have caused it are intermitted. The third is only felt at the edges of the chancre, and is moreover, like the last named, of different character. This difference between hardness and induration I have frequently pointed out to you in the wards of the infirmary, and I shall not, therefore, attempt the difficult task of explaining it orally.

There are some parts of the body in which induration is more distinctly manifested than in others. Thus on the corona it is more prominently marked than on the prepuce; upon the labia, the clitoris, and the nymphæ, more than on the cervix or the mucous membrane of the vagina. At the anus it is extremely difficult to detect, and some authors have doubted its occurrence at all on the os uteri. I have, however, seen one well marked case of indurated chancre on this portion of the body in which secondary symptoms supervened, and Ricord has seen others. Upon the lips and tongue induration is generally well marked.

The cause of this difference is probably due, as Ricord supposes, to the difference in the quantity of lymphatic vessels distributed to a part. Where these are plenty, the induration is decided, and vice versa.

The indurated base has been submitted to microscopical examination by Robin and Marchal, who detected as the principal elements an increased amount of white fibrous tissue, and a considerable amount of amorphous matter. I have also several times examined this substance microscopically, but never found anything but an increased amount of connective tissue in various stages of development. My examinations do not differ essentially in their results, therefore, from those above referred to. So much for the induration at present, though at a future time I shall return to the subject; there are other features of the infecting chancre to which I wish to draw your attention.

The indurated chancre is seldom large, rarely larger than a half dime, and is not accompanied with as much irritation as attends the soft variety. The edges of the chancre, instead of being perpendicular, are inclined towards the centre of the base, so that it presents a cup-like appearance. The bottom of it is generally even and shining, and of a light-grey color, though sometimes red. The discharge from it is not plentiful as in the soft chancre, and is different microscopically. As I have already mentioned to you, the secretion from the surface of a soft chancre is puriform. When it is submitted to microscopical examination it is seen to be mainly composed of pus corpuscles of perfectly normal structure. On the other hand the secretion from an indurated chancre is thin, and, when examined with the microscope, instead of numberless pus globules a few only are seen. The morphological elements are principally epithelial cells. When acetic acid is added to the fluid the pus corpuscles dissolve without giving any evidence of the existence of a nucleus. Doubtless, however, this is present, but undergoes solution with the cell wall. We have seen that the simple chancre is generally multiple; the infecting chancre, on the other hand, is usually single. M. Fournier found, that of 456 patients affected with indurated chancre 341 had only one, 86 had two, 20 had three, and 5 had four, 2 had five, 1 had six, and one had nineteen; making altogether 115 cases in which they were multiple. The indurated chancre, therefore, being single in three out of four cases.

M. Clerc found the indurated chancre single in 224 cases, and multiple in 43, the instances of the latter being less than a sixth of the whole.

My own experience is to the same effect; of 168 cases of indurated chancre in which I have noted down the circumstance, I find that 141 were single, and only 27 multiple, a little less than one-sixth of the whole number.

The reason for this you already know from what has previously been said to you. An individual has an indurated chancre but once, and consequently he is not liable to contract fresh chancres from an original sore. There is, therefore, in general but one way by which more than one indurated chancre can exist upon the same person, and that is by the simultaneous inoculation of several distinct parts of the body. A portion of chancrous matter may be deposited for instance in the fourchette, another portion near the urethra, another portion on the cervix uteri. Under such circumstances we may have three distinct chancres progressing synchronously.

Owing to the fact that an individual has an indurated chancre but once in a lifetime, we have one of the most certain methods of distinguishing this form of chancre from the soft variety. The secretion from an indurated chancre, when inoculated on the affected individual, gives negative results. No chancre is formed, whereas there is perhaps no limit or at most an exceedingly remote one to the number of successful inoculations which may be practised on one person with the matter of the simple chancre. M. Lindman, who may fairly claim to exhibit in a pre-eminent degree that devotion to science which so frequently characterizes her rotaries, has inoculated himself successfully nearly 3000 times.

You must not, however, understand me to say, that an individual who has once had an infecting chancre, can absolutely never have another. Small-pox, scarlet fever, and measles, as a rule, occur but once, yet occasionally we meet with persons who have them twice. But I believe that the immunity from indurated chancre is greater with those who have once had this sore than that given by any other infectious disease with which we are acquainted. I have several hundred times endeavored to inoculate individuals with the virus from indurated chancres on their own persons, and never once with an affirmative result.

But there is another fact of importance connected with the inoculation and contagion of these chancres which requires attention. You will doubtless recollect that, in speaking of the soft chancre, I stated, that when it is far advanced in the process of healing it loses in a great measure its specific character, and is no longer capable of being propagated. This view is contrary to that held by Ricord and his followers, who contend that a non-indurated chancre retains its virulent character to the last. We will not stop now to discuss this point. In regard, however, to the infecting chancre there can be no doubt; it becomes less virulent when it ceases to progress, and when it has commenced to heal loses its virulent characteristics entirely. It can no longer be propagated by inoculation. You must not forget this fact in your practical studies, for it is one of very great importance.

The indurated chancre is not so liable to complications such as inflammation, excessive ulceration, or phagedena. It is quite a rare event to find an infecting chancre thus attacked. I have seen but two cases of phagedena supervening on an indurated chancre, and both of these were in New Mexico.

Another phenomenon of the indurated chancre is the indurated bubo, to which reference has already been incidentally made. This is an almost constant companion, Ricord thinks an invariable one; but I am satisfied that in some cases it may be prevented by the timely administration of mercury. I should say it is inevitable, if mercury is not given so as to produce its characteristic effects upon the system at a very early period of the disease. A few weeks since a gentleman came to my office with a well marked indurated chancre on the frænum. It was still in its pustular condition, and I cauterized it with the sulphuric acid paste. The bi-chloride, in combination with the iodide of potassium (a compound which I have generally found to possess very decided advantages), was then administered. The chancre commenced to heal kindly, and no bubo appeared. After taking the above combination for a little more than a month it was discontinued, the chancre having entirely cicatrized; and though it remained indurated during the whole process of healing, the induration became less and less, and when I saw him a few days since it had entirely disappeared.

I have also seen one case in which secondary symptoms manifested themselves, and in which there had never been a bubo. The chancre was situated upon the corona, and was seen very early after infection—on the fifth day. Induration was well marked. It was cauterized, and the patient placed at once under the influence of mercury. Secondary symptoms appeared during the sixth week. The chancre by this time had healed entirely, but there was no bubo.

These cases are certainly to be regarded as exceptions, and hardly invalidate the correctness of the law laid down by Ricord relative to the invariable attendance of the indurated bubo on the indurated chancre.

This form of bubo is doubtless to be regarded as of very great importance in diagnosing the character of a venereal sore, and I shall therefore mention now some of its more obvious characteristics, reserving the full consideration of it for another occasion.

The bubo consequent upon an indurated chancre, is always seated in those glands which are in direct relation with the lymphatic vessels of the affected part; in this respect, therefore, being in no way different from the bubo due to the presence of a simple non-infecting chancre. Thus if the chancre is seated on the hand, the glands immediately above the elbow are the seat of the bubo; if the chancre exists on the lips, the submaxillary lymphatic glands are affected; if the penis, the scrotum, or the labia are the seat of chancre, the buboes will be found in the superficial inguinal glands, and so on. Let us take for an example the inguinal bubo, as it is more frequently met with, for obvious reasons, than any other.

During the first week or at latest during the second week of the existence of an indurated chancre, the indurated bubo makes its appearance. From the first you have a valuable sign, by which it may be distinguished from any other form of bubo in this, that the enlargement is not limited to a single gland, as in the other species of bubo, but affects all the glands of the cluster to which the lymphatics of the chancrous region are distributed. The indurated glands feel as if they were bullets placed under the skin, being quite characteristic in this respect.

The indurated bubo never suppurates unless it is attacked with inflammation from some other cause, as cold, injury, etc. In such cases it never furnishes inoculable pus, and here we have two points of difference with the bubo resulting from the absorption of the pus of a soft chancre, which always suppurates, and which does furnish pus capable of causing a chancre of the same species as the parent ulcer.

These, gentlemen, are some of the chief symptoms and concomitants of the infecting chancre. There are others, however, of still greater importance which we will discuss in subsequent lectures, as also some other interesting points relative to the indurated bubo. In the foregoing remarks I have mainly considered those circumstances which are indicative of the presence of this form of chancre, and which consequently are of most importance to you in enabling you to arrive at an early and exact diagnosis.

Original Communications.

SANITARY SCIENCE IN THE CAMP.

BEING THE CONCLUSIONS OF THE COMMISSION APPOINTED BY THE BRITISH GOVERNMENT, TO INQUIRE INTO THE SANITARY CONDITION OF THE ARMY IN THE CRIMEA.

By GEO. W WILDE, M.D.
OF LONDON.

Although it has been my fortune to spend a considerable portion of my professional life abroad, I still take a deep interest in the political affairs of my native country, and would gladly add whatever of influence or power I may possess to sustain a Government, the wisest and most beneficent ever created, in its efforts to maintain its supremacy. That the Federal Government will have an army of any dimensions which it may require, I do not doubt; nor do I doubt the results of the war. The old flag—the stars and stripes—will long continue to float an emblem of a united and a free government; not only over every inch of our national domain, but in every harbor of the civilized world.

But the question of vital interest to me is, will there not be an immense and needless sacrifice of life from preventible diseases in an army so quickly collected from among the people, and so unaccustomed to the habits and pursuits of the soldier's life? I am glad to learn that this subject has already engaged your attention, and that measures have been taken by government to remedy these evils.

My attention has been repeatedly called to the sanitary condition of troops in my travels on the continent, and in the East; and my observations have given me the liveliest apprehensions in regard to the health of the vast army now assembled along the borders of the Southern States. Unless the highest degree of intelligence in matters relating to the management of troops in camp, and in the field, is possessed by the medical staff, the disasters by sickness are far more to be apprehended than reverses on the battle-field; as American physicians have had little actual experience in military life, and as the medical literature or military surgery has to be obtained, for the most part, from abroad.

Yet, it has occurred to me, that there is a large fund of facts relating to the hygiene of armies contained in public documents, and hence quite inaccessible—at least to the majority of medical men. The record of many of these investigations are rich in the fruits of sanitary science applied to armies. I believe I cannot do my professional brethren at home, who are now engaged in their country's service, a better service than by giving at some length, and in detail, except where condensation is possible, the results of some of these official inquiries.

The following are the conclusions of the Sanitary Commission sent to the Crimea by the British government, to inquire into the sanitary condition of the troops. They will be seen to embrace the most important facts relating to the hygiene of camps, and are the result of a series of long and laborious observations:—

PRACTICAL CONCLUSIONS RESPECTING THE CAMP.

I. THAT by far the greater part of the disease and mortality existing in the camp, when the Commission arrived in the Crimea, was due to zymotic maladies, such as cholera, fever, diarrhœa, and dysentery.

That besides the effects of topographical and climatic peculiarities connected with the occupation, and making allowance for the predisposing influence of other conditions, to which the troops had been exposed, the prevalence of zymotic maladies was obviously connected with local favoring causes, essentially the same in kind as those observed in civil life, especially in rural districts, namely:

Damp.
Impure Air.
(Although in a minor degree) Impure Water.

II. Attacks of zymotic disease were observed to be connected with the three following sources of dampness:

A wet subsoil; a retentive surface soil; confined locality.

1. Of these three conditions, *a wet subsoil* occasioned the largest proportional amount of sickness.

The experience of the 79th Regiment, and that of the 31st and Royal Artillery, who were successively camped on the same ground, below Marine Heights, proves that one of the worst sites for a camp is that in which a thin bed of porous material rests upon an impervious bed beneath, which retains the water, and keeps the subsoil charged with it, while the surface may afford little or no indication of the fact.

Dangerous sites of this kind were often marked by a greener or more vigorous vegetation than that of the surrounding district, or by water-springs coming to the surface, or by evening fogs settling over them sooner than over the adjacent country.

Before selecting positions for camps in unknown ground, it would be very advisable to dig trial holes a few feet deep, to ascertain what is the condition of the subsoil drainage, and not to risk the health of the men in camping on ground in which these trial holes show the presence of water near the surface.

Should it be necessary, for military reasons, to hold a position on a wet subsoil, the whole should, if practicable, be thoroughly drained by deep trenches, and if there be a hillside or water-shed above the ground, the surface water from it should be turned aside from the site by deep, catch-water drains, as was done with the camp of the Highland Division at Kamara.

If the position be such that deep trenching and draining cannot be carried out, it is in the highest degree probable that if held for any length of time, it will be at a considerable sacrifice of the force.

2. *The retentive character of clay surface soils*, and the difficulty of draining such soils, render it advisable to avoid them as camping-grounds, when it is possible to do so.

Wet clay soils keep the air near the ground damp and cold, and they affect the atmosphere of tents and huts in a similar manner. There was sufficient proof of their injurious effects on the health of troops in the Crimea.

Where such soils must be occupied, for military reasons, the defects in the natural drainage should be remedied, as far as practicable, by trenching the ground, and by trenching the site of every hut and tent separately, connecting the hut and tent drains with the larger trenches. In this way, not only are the sites and the vicinity of the huts and tents kept comparatively dry, but the surface water is more readily removed, the exhalations from the damp soil diminished, and the air purified. The experience of the army in the Crimea showed the very beneficial effects of this surface drainage and trenching on the health of the troops.

3. *Dampness of the air, arising from the nature of the locality*, proceeds from the topographical peculiarities of the ground preventing a free circulation of the air, and the atmosphere becoming stagnant, and charged with moisture and emanations from the ground. The valley of Karani above Kadikoi afforded an illustration of this, in certain states of the weather.

It was observed in other parts of the seat of the war in the East, that damp white mists, settling in valleys or hollows occupied by troops, had been the precursors of epidemic diseases, especially of cholera. All valleys are at times exposed to similar occurrences, especially such as contain stagnant lakes. An unhealthy and stagnant state of the air is sometimes increased by brushwood or trees.

There is often no escape from epidemic sickness occurring among troops from the occupation of such positions; they should, therefore, be avoided or abandoned.

III. The evils resulting from these local causes of dampness were not unfrequently aggravated by the manner of pitching tents and erecting huts. Want of due preparation of the ground and defective drainage of the site, often led to a damp state of the air within huts and tents, and induced a tendency to fevers.

Deep trenching round the tent-site, as already mentioned, is the best remedy, and in the case of huts, the site should be isolated from the surrounding ground, and the area to be occupied by the hut, drained by a trench dug round it at least a foot below the level of the floor.

If it be not practicable to drain the subsoil, and if the position must be held, adequate provision should be made with any materials at hand for raising the beds of the men above the ground.

Huts should never be banked up with earth against the wood. The experience in the Crimea has shown that it is a dangerous practice, for it used to be a common cause of fevers. An interior lining, even of old newspaper, affords a much better, and at the same time a perfectly safe protection from draughts.

The flooring of huts should be occasionally raised, the surface of the ground below cleansed, and quicklime and charcoal strewed over it.

For hospital huts, an interior lining of boards, or building a rough rubble stone wall outside, as was done in many of the regimental hospitals, affords the requisite protection from weather, and from sun heat.

IV. The camp before Sebastopol was, generally, remarkably clean when first visited; but there were in certain situations sources of atmospheric impurity from putrescent organic effluvia, likely to influence injuriously the health of the troops. The chief of these were:

Picketting-grounds, and manure heaps.

One or two slaughtering-places, and latterly the large cattle depôt and slaughtering-place at Kadikoi.

The graveyards and putrid marsh near Balaklava.

Latrines kept too long open, and exposing too large a surface.

When an army can shift its ground at will, danger to health from similar evils can always be avoided by doing so.

When, on the other hand, an army is tied to its position for a length of time, the camp becomes a town, and is subject to all the sanitary defects of towns, as these existed before the introduction of the first great step that was taken for improving the public health, namely, the introduction of paving.

Picketting of horses saturates the ground they occupy with organic matter. In like manner, accumulations of manure, if allowed to remain, saturate the ground they cover. Filth of any kind is washed into the ground by the rains, or trodden into it by the steps of men and animals, and must necessarily give off impure emanations under the joint action of sun heat and moisture.

To avoid the injurious consequences likely to arise from these circumstances, it is indispensably necessary to observe the most scrupulous cleanliness over the whole surface and vicinity of a camp. All refuse should be at once swept up, and removed to a distance. None should ever be allowed to accumulate within, or in the immediate vicinity of a camp.

Bones and refuse of food can be most easily disposed of by burial.

Stable litter and all inflammable refuse should be carefully burned. The usual method of forming heaps of litter and firing it, is imperfect. Before being fired, it should always be opened up, to admit the air to dry it, and to expedite the combustion. Manure heaps burn with difficulty, if left on the ground for any length of time before they are fired.

Carcases of animals and offal should be buried to a sufficient depth below the surface. Three feet is enough under ordinary circumstances. Refuse charcoal dust thrown over tainted ground will assist in deodorizing it, or, if that be not obtainable, the burning of stable litter on the spot will furnish sufficient charcoal for the purpose.

Latrines should be made narrow and deep; a quantity of earth should be thrown into them each day, until they are filled within two feet of the surface, after which the latrine should be filled up, and another dug.

When an army requires to occupy the same surface of ground for years, it would be unsafe to bury the refuse in the ground, because eventually the soil would become saturated with organic matter, and dangerous to health.

In such a case, the construction of furnaces to consume every organic product of the camp, is by far the best and safest proceeding. Speedy collection, removal, and destruction by fire of all such refuse matters obviates any risk of danger from them.

V. *Atmospheric impurities arising from overcrowding and defective ventilation of tents and huts*, were a frequent predisposing cause of zymotic disease.

Were it practicable in warfare to diminish materially the number of men sleeping in tents, it would be advisable to do so.

But considering the limited transport at the command of an army in the field, the injurious consequences of overcrowding may, to a considerable extent, be obviated by a free ventilation of huts, and by improving the construction of tents and marquees, by introducing effectual means of ventilation round the top of the poles.

In the case of huts, ridge ventilation is the most efficient.

Lime-washing huts inside, especially hospital huts, purifies the air; lime-washing of huts outside protects them, to a certain extent, from the intense sun's rays, and keeps them cooler within.

The usual practice of striking tents and shifting ground is an excellent means of avoiding the effects of saturation of the earth by emanations proceeding from the breath and bodies of the men.

VI. The condition in which the water was drawn for use in the camp was likely, especially during the prevalence of cholera, to aggravate the severity of the disease, although not to a great degree.

It is always desirable that water for drinking and cooking purposes should be as nearly as possible destitute of color, taste, or smell. Anything that interferes with these three natural tests is more or less injurious to health; but marsh water, however apparently pure, is not wholesome.

All engineering works for supplying camps with water should comprehend—

The selection of the purest obtainable source.

The delivering the water for use as pure as it is at its source.

If it be necessary to pound the water, the tanks should be covered.

Water should, if practicable at all, never be drawn by dipping, if it be rendered muddy in the act of being so drawn.

If a source of water of sufficient purity be not obtainable, the water should be filtered. A filter may be made with sorted gravel, clean sand, and charcoal.

Every trough for supplying horses should have a separate inlet and overflow.

GENERAL CONCLUSIONS FROM THE WHOLE EXPERIENCE.

I. That as scurvy, and the forms of disease connected with it, almost disappeared from the army under the influence of improved diet, clothing, etc., so, in like manner, zymotic diseases, the destructive effects of which mainly depend on breathing a humid, tainted atmosphere, declined on the carrying out of suitable sanitary works and measures.

II. That men just arrived in a new country are especially liable to suffer from prevailing zymotic maladies. That any given number of reinforcements will not compensate to the service for the loss of the same number of the original force from these diseases, and hence the necessity for effective sanitary precautions is doubly imperative, whether as regards the abatement of local favoring conditions, or the discovery and immediate treatment of the premonitory stages.

III. As the result of their whole experience, the Commissioners beg to express their opinion, that, inasmuch as the neglect of military hygiene, whether as regards the soldier personally, or the sanitary condition of camps, barracks, and hospitals, has hitherto, in all countries, climates, and seasons, been the cause of the largest amount of loss in armies, the whole subject, closely connected as it is with the physical efficiency of Her Majesty's forces, demands in future a practical development commensurate with its importance to the public service.

REPORT OF A CASE OF DIPHTHERIA

Terminating in Membranous Croup.—Operation of Tracheotomy by Dr. L. A. Sayre.—Recovery.

By C. JOHNS, M.D.,

of New York.

Ann O'Grady, aged three years, attacked on the 18th July, 1860, with sore throat, slight enlargement of tonsil and lymphatic glands. I was called on the 20th, and found her with pulse 130, tongue thickly coated with white crust, edge very red; right tonsil much swollen, and covered like the tongue; fauces and uvula highly inflamed; considerable swelling under right ear; high state of febrile excitement; great thirst; deglutition difficult; flow of saliva very profuse. From the above symptoms, I did not hesitate to pronounce it a case of "Diphtheria." Previous to my being called, Dr. Knight, who was boarding in the house (Stevens House), had been consulted, and had prescribed an aperient, which had acted kindly. I prescribed a strong decoction of vegetable astringents, sweetened with honey, to be used as a gargle; spts. mindereri and tinct. opii for external use, together with light diet.

21st.—No material change in symptoms; pulse nearly the same; saliva continues to flow freely; ordered mild solution of chlorate potassa for gargle, and Dover powders for anodyne and febrifuge.

22d.—Has been rather restless; pulse 140 per minute; discharge from mouth same, with well marked diphtheritic *odor;* upon the whole, the symptoms more aggravated, though I do not think them really alarming. In the evening found her more comfortable; ordered to increase the anodyne; has not taken nourishment well to-day—struggles when anything but cold water is offered her.

23d.—First visit, symptoms no worse, but she is weaker; bowels moved during the night; pulse 120; saliva continues to flow as freely as ever; external swelling very much less; masses of the diphtherite crust have separated from the tonsils, tongue, and fauces; mucous membrane very red and exceedingly sensitive; aversion to medicine and nourishment.

24th.—First visit ten o'clock; recognise that well known and unwelcome sound, peculiar to membranous croup, not of brassy shrillness, but quite plain enough to cause alarm as to the chances of recovery. Prescribed equal parts tincture and syrup of ipecac, of which teaspoonful doses were given every five to eight minutes; have the feet in warm water; bruised onions, and fine-cut tobacco, and goose grease to the throat and chest; continued the emetic in occasional doses for an hour or more, but no emesis took place; pulse 160 per minute. As suffocation seemed impending, tracheotomy suggested itself as a final resort; but neither of the surgeons sent for could be found. The child now began to breathe easier, but did not vomit; gave sulp. zinc in five grain doses, at intervals of fifteen minutes, till three doses were given; still no vomiting.

Four o'clock P.M. She vomited soon after I left, voiding a large quantity of viscid mucus, which has relieved her very much; attempted to use the probang, but she struggled so that I could not succeed with any satisfaction. I now gave turpeth mineral, one-half grain doses every two hours. Leave for an hour; return at seven; found her breathing quite comfortably, and discharging quantities of thick viscid mucus, which led me to believe that the turpeth mineral was acting as a solvent to the false membrane; continue it; patient swallows a little light nourishment; bowels move slightly.

Ten o'clock P.M. Found her breathing more laborious. Dr. Hays (who was stopping at the house) came in, and in consultation with him and Dr. Knight, an operation was advised. Dr. Sayre was accordingly called in consultation, and after a thorough examination of the case, he decided "that her best chance of recovery is in an operation." Finally, after three quarters of an hour had been spent in coming to a *final conclusion*, and obtaining the mother's consent, Dr. Sayre performed the operation. (No anæsthetic was given.) Breathing was at once relieved. Instead of inserting a tube, the doctor made the opening of an elliptical form.

The operation was performed about three o'clock A.M. of the 25th. I saw her several times during the day, and each time found her doing very well. Had great difficulty in getting her to take either food or medicine. She slept several times during the day; countenance very much improved; wound had to be cleared of mucus and small patches of membrane every few minutes. Dr. Sayre saw her in the evening, and inserted the tube, immediately upon which was ejected through its orifice a perfectly tubular piece of false membrane, an inch in length. Breathing went on very well through the night, but great care had to be constantly taken to keep the passage clear.

26th.—Made an early visit; found her breathing very laborious, and was obliged to use extra means to clear the opening, which being accomplished, gave great relief. She had taken no food, but drank a little water with brandy in it.

Met Dr. Sayre at half-past ten A.M.; gave the tube another clearing out, and left her quite easy. Saw her at four P.M.; no material change; still refused drink, food, and medicine; had slept considerable. Met Dr. Sayre in the evening, and he removed the tube, and directed the doors and windows to be kept closed for the night.

27th.—Saw her again at six A.M.; found she was better *without* the tube than with it, as it was continually being filled with patches of membrane which were detached at every paroxysm of coughing. I was obliged to make a small probang, with which the orifice had to be cleared very frequently. A constant watch has to be kept, or she would suffocate with the mucus which escapes. At eleven o'clock A.M. met Dr. Sayre. He carried the probang down to the bifurcation of the bronchial tubes, and upon withdrawing it, a large quantity of viscid mucous patches of membrane came away, which very much relieved her. Upon my evening visit, I found her nearly moribund; extremities cold, and covered with a cold, clammy sweat; pulse nearly extinct at the wrist; very restless; breathing short and *tediously* laborious; eyes and countenance have every appearance of dissolution. Dr. Andrews had been called in the emergency, but thought nothing could be done to save her, and had left before I arrived. My first impression was that all was over with her, and I was about to sit down, as the mother requested, and let her depart without further torture. But my second thought was, to dissolve some nit. argenti, and saturate the probang, and thrust it down to the bronchi. It dislodged a quantity of loose patches of membrane, which came away with the swab, and much more immediately followed by a paroxysm of coughing. The effect was like magic. She breathed more freely. In five minutes I repeated the operation, with like results. In ten minutes more the pulse at the wrist became distinct, and in a few minutes that death-like pallor of the face began to yield to a tinge of color. The swab was again used, and warm articles were applied to the limbs, and warmth soon began to return. She was now put in bed. Not a particle of stimulus or nourishment could be forced down her, but she would take clear water when allowed. After resting awhile, four ounces of beef tea, with a little brandy, and two grains quinine, were thrown up the rectum, and *retained*. We watched her closely till morning. She breathed quite easily, and slept tolerably during the night.

28th.—Met Dr. Sayre at eleven A.M., who brought a double tube, which he made great effort to introduce, but failed; it was too large. Directed pails of hot water to be kept in the room, doors and windows to be kept closed, and hot bricks to be immersed in the water frequently; also to keep the temperature at a standard of 80°. Evening visit, found everything going on well; nothing but water could be forced down her; continued the beef tea, brandy, and quinine every four hours.

29th.—Early visit; find she has rested well—has only been disturbed to clear the orifice; membrane is being thrown off in patches, which, at times, nearly obstruct the passage. We are really obliged to remove some of it with small forceps. Steam to be continued; broth, brandy, and quinine to be given as usual. Evening visit; no change, except an increased softening of membrane. Same treatment through the night.

30th.—Morning visit; find all going on favorably; no change in treatment. Evening; continues favorable; have abandoned the tube; use the probang frequently, carrying it both *up* and down.

31st.—Still doing well; begins to take brandy-punch by the mouth; most profuse discharge from the orifice; obliged to clear it every few minutes. Continue steam, injections, &c.; membrane evidently dissolving. It had, no doubt, passed quite into the bronchial tubes.

Aug. 1st.—Favorable as ever; continue treatment as usual; takes brandy-punch as freely as can be wished. Has not uttered so much as a *whisper* since the operation, but evidently passes some air through the mouth. 2d.—Had rather a restless night. Her mother thinks part of what she attempts to swallow passes out of the orifice. Has taken some nourishment by the mouth. Dr. Sayre has not seen her in two days.

3d.—Found her on the bed, playing; called for a bottle of champagne this morning, and would have some to drink; looks much better; her mother says she breathed through mouth and nose in the night; wound begins to granulate, but profuse discharge continues. Takes nourishment freely; do not continue steam quite so high. 5th.—Has taken quite a breakfast at the table with parents; is decidedly better; discontinued steam. 6th.—Wound healing rapidly; bowels have moved kindly; speaks *distinctly* in a whisper. 7th and 8th.—Everything goes on well; nearly all the discharge is through the mouth and nose. 9th—Has been out; is now taking dinner. 11th.—Continues to gain rapidly; wound nearly closed. 12th.—Rode out to-day; looks very well. 15th.—Rested well last night; throat much better; wound entirely healed. 29th.—Has had an attack of diarrhœa, which yielded readily to the remedies. Is gaining flesh, and now goes to the country.

REMARKS ON THE USE OF TOBACCO.

By D. J. LYSTER, M.D.

OF BROOKLYN, N. Y.

It is truly surprising that a single individual can be found, who, after experiencing the distressing sensations almost invariably produced by the first *use of tobacco*, would be willing to risk their recurrence a second time; still more so, that any one should again and again resort to the " noxious weed" until, its immediate effects being lessened by habit, it becomes an article of luxury, from the use of which it is found difficult to refrain. The extreme nausea—pain of the head, and vertigo—the cold death-like sweat, and general exhaustion, experienced by the novice in chewing, snuffing, and smoking, we should imagine would be fully sufficient to prevent the use of tobacco from becoming a habit. Yet such is "the folly and infatuation of the human mind," and the power of custom and example, in opposition to prudence and the dictates of nature, that one of the most disgusting productions of the vegetable kingdom, "in all places where it has come," to use the quaint expression of Sir Hans Sloane, "has much bewitched the inhabitants, from the polite European to the barbarous Hottentot."

Did this modern herb possess a tithe of the virtues ascribed to it by Dr. Thorus, in his Patologia; did, in fact, the least benefit result to the system from its habitual use there would then be some reason why, with all its loathsomeness of smell and taste, it should have become so general a favorite. But we know, on the contrary, that all who habituate themselves to its use, sooner or later experience its noxious powers. Tobacco is, in fact, an absolute poison. A very moderate quantity introduced into the system—even applying the moistened leaves over the stomach—has been known very suddenly to extinguish life. The Indians of our country were well aware of its poisonous effects, and were accustomed, it is said, on certain occasions, to dip the points of their arrows in an oil obtained from the leaves, which being inserted into the flesh, occasioned sickness and fainting, or even convulsions and death.

It must be evident to every one, that the constant use of an article possessing such deleterious properties, cannot fail at length to influence the health of the person. In whatever form it may be employed, a portion of the active principles of the tobacco mixed with the saliva, invariably finds its way into the stomach, and disturbs or impairs the functions of that organ. Hence, most, if not all, of those who are accustomed to the use of tobacco, labor under dyspeptic symptoms. They experience, at intervals, a want of appetite, nausea, inordinate thirst, vertigo, pains and distension of the stomach, disagreeable sensations of the head, tremors of the limbs, disturbed sleep, and are more or less emaciated.

According to Boerhaave, "When this celebrated plant was first brought into use in Europe, it was cried up for a certain antidote for hunger, but it was soon observed that the number of hypochondriacal and consumptive people were greatly increased by its use." Dr. Cullen informs us that he has observed several instances, in which the excessive use of tobacco in the form of snuff, has produced effects similar to those occurring in persons from the long continued use of wine and opium, that is, "loss of memory, fatuity, and other symptoms of a weakened or senile state of the nervous system induced before the usual period." The almost constant thirst occasioned by smoking and chewing has, in numerous instances, it is to be feared, led to the intemperate use of ardent spirits. This thirst cannot be allayed by water; for no insipid liquor will be relished after the mouth and throat have been exposed to the stimulus of the smoke or juice of the tobacco; a desire, of course, is excited for strong drinks, which soon leads to intemperance and drunkenness. The use of snuff destroys entirely the sense of smell, and injures materially the tone of the voice; while chewing and smoking vitiate the sense of taste. Hence, those who make use of tobacco, to any extent, have certainly one, and frequently two of the external senses less perfect than other individuals. But this is not all: Polypus of the nose, and *other* serious affections, have been traced to the use of snuff.

Sir John Pringle, who, we are informed, was very liberal in its use, experienced in the evening of his days a tremor of his hands, and a defect of memory. Being in company with Dr. Franklin, at Paris, he was requested by the Doctor to observe that the former complaint was very common to those people of fashion who were great snuffers. Sir John was led, by this remark, to suspect that his tremors were occasioned by his excessive use of snuff. He, therefore, immediately left it off, and soon afterwards the tremor of his hands disappeared, and at the same time he recovered the perfect exercise of his retentive faculties.

Cases could be mentioned in which epilepsy, consumption, and other serious diseases have been brought on in young people by the excessive use of tobacco. I have known myself individuals in whom very severe and dangerous affections of the stomach, tremors of the limbs, and great emaciation were referrible to excessive smoking and chewing, and which were removed only after these habits were entirely relinquished.

One or two of these cases, I am sorry to say, occurred in females, from the filthy practice of chewing snuff; and in a class of society where it was to be hoped a refinement of taste and exalted notions of female delicacy, would for ever have precluded the introduction of so detestable and pernicious a habit.

Reports of Hospitals.

ST. LUKE'S HOSPITAL.

[Reported by Robert Watts, Jr., M.D., Resident Physician.]

EXTENSIVE FRACTURE OF THE RIBS—DISLOCATION OF THE HEADS OF TWO RIBS.

A—— B——, a stout, strongly built Scotchman, 59 years age, a master-mason in the Central Park, was brought to the hospital on the 27th of April, 1861. While at work in the morning, engaged in building a stone bridge, the derrick by which the stones were being hoisted fell over upon him. One end of the derrick caught upon the bridge, so that its weight did not rest upon the man's body, but he was severely crushed. He complained of severe pain in the back of his neck and between the shoulders, and was unable to turn his head with any freedom on account of the suffering it produced. He was able to speak and to swallow without any difficulty. The breathing was a little hurried and oppressed, and any attempt at a full inspiration produced great pain in the right side. He had coughed up a little florid blood. On auscultating the chest, the breathing on the left side was found to be natural, while on the right side very little air entered the lung. No abnormal heart sounds were detected. There was complete paralysis of sensation below the waist, and also of motion in the lower extremities. The patient complained of a tingling sensation in the little and ring fingers of each hand, and any motion of the arms caused pain between the shoulders. The pulse was 76, regular and of good strength; the mind was clear the surface of the body was warm, and there were no symptoms whatever of prostation.

On examining the patient carefully, it was found that the 5th, 8th, 9th, and 10th ribs on the right side, were broken at their arches, and that the lower costal cartilages on the same side were loosened from the sternum. No injury of the spine could be detected on the most careful examination, and the patient bore firm pressure over its entire length without complaining of any pain. A broad bandage was secured tightly around the thorax, and small doses of the liquor ferri persulphatis were given with a view to check the hemorrhage from the lung, which was very slight, and soon ceased.

A flaxseed poultice was put on the back of the neck where the pain was complained of. The patient remained comfortable during the day, and towards evening some little sensation returned in the legs, so that he could appreciate the touch of a person's hand laid upon them. The bladder was emptied with a catheter, as he was unable to pass his water, and about eight ounces of dark colored urine were drawn off.

At 11 o'clock P.M., he was feeling quite comfortable, and complained only of a little oppression in the chest. The respiration was a little hurried. The pulse was 88, and there was no fever. The mind was quite clear. At 1 o'clock P.M., he asked for a drink of water, after taking which he apparently went to sleep. The attendant remained at a short distance from the bed. The patient remained perfectly quiet, and the nurse on going up to him half an later, found him lying in exactly the same position as when he had left him, but he was dead.

The autopsy was made twelve hours after death.

The sternum was broken transversely, the manubrium being separated from the body, but without any displacement. The lower costal cartilages on the right side were loosened from their attachment to the sternum. All the ribs from the 1st to the 10th inclusive, on both sides, were found to be broken short off from the vertebræ, but were held in place by the surrounding soft structures, so that it was only by dissecting up these and then moving the ribs, that the fracture could be detected. The fracture was through the necks of the ribs. The 5th, 8th, 9th, and 10th ribs were also broken at their arches, and the sharp ends of the fragments projected through the pleura.

The heads of the 8th and 9th ribs on the right side were moreover dislocated and pushed forward into the side of the vertebral column, in which situation they presented two prominent projections. No injury of the spinal column itself could be detected. Both lungs were tightly bound down by old adhesions, and both contained tubercles at their apices and scattered through their substance. The right lung was wounded in two places, and was very much engorged with blood, and entirely useless as a respiratory organ. There was a small amount of blood in the right pleural cavity. The heart and kidneys were healthy, and there was no injury of any internal organ except the right lung.

The brain and spinal cord could not be examined.

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Illinois Natural History Society.—At the last session of the Illinois Legislature and act was passed incorporating this Society. The objects are stated to be, to conduct and complete a scientific survey of the State of Illinois, in all the departments of natural history, and to establish a museum of natural history at the State Normal University, comprising every species of plants, insects, quadrupeds, birds, fishes, shells, minerals, and fossils, within the State limits; comprising also such other collections of natural history from various parts of the world, as may be deemed necessary. It is also to provide a library of scientific works.

Number of Medical Officers required.—A European force of 12,000 men, artillery, cavalry, and infantry, ought to have present on their first field of battle, one Inspector-General of Hospitals, one deputy (or two if the service is likely to continue), six staff surgeons, a surgeon and three assistants to each regiment, or some six or more staff assistant surgeons unattached, to be employed as circumstances may require.—*Guthrie.*

Major-General McClelland.—This distinguished officer is a son of the late Dr. **Geo. McClelland**, of Philadelphia.

American Medical Times.

SATURDAY, JULY 27, 1861.

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RANK OF CIVIL AND MILITARY SURGEONS.

Civil and military medicine are separated by no arbitrary distinction. Proper qualifications for the practice of the former, are not to be taken as evidence of fitness to enter, without further preparation, upon the duties of the latter. Nor is it true that a surgeon even of long experience and great reputation in civil practice, is rendered thereby competent to discharge readily and intelligently the duties of the military surgeon. It scarcely more logically follows that a blacksmith is necessarily a good watchmaker, because an ingenious mechanic, than that a country or city practitioner must be a qualified army surgeon because he has a medical diploma. He may have been a good family medical attendant in the town where he resided, and perhaps has given some attention to domestic hygiene, but he knows nothing of the habits of soldiers; of their diet; of the sites, choice, and ventilation of tents. In other words, he has learned little or nothing useful or definite in regard to camp or hospital hygiene. He may have enjoyed an unenviable reputation as a surgeon, and yet never have met an accident peculiar to the field of action. And if we add to these more obvious duties of the army medical officer, the "thousand and one" details of business in his department which tend to render his services useful and beneficial in the peculiar emergencies of the soldier's life, both in camp and in the field of action, we need not hesitate to say that the civil practitioner must have both knowledge and experience before he can fill his position efficiently as an army surgeon.

Military surgery, therefore, is civil surgery with something added; that is, the person who aspires to the rank of the former, must have superadded to the knowledge required for the latter position, an education in principles, and their application to practice, of which his former routine gave him scarcely a conception. Such would be our conclusions from the inherent nature of the duties which devolve upon the civil and military medical practitioner. But let us recur to the practice of those governments where military surgery takes its proper rank, for from them must we learn whatever lessons of experience military science teaches.

In England, the candidate for an appointment in the Medical Department of the Army must have a diploma from the Royal College of Surgeons of London, Dublin, or Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow, or of Trinity College, Dublin. He is then examined by the Director-General, and two senior officers, and if found qualified, he is selected for temporary service in the General Hospital at Chatham. Here he is instructed in various branches relating to the army service, and upon his proficiency in these latter studies depends his appointment to actual service.

In France still more importance is attached to the education of the Army Surgeon. He must first possess the Doctorate of Medicine, and then undergo an examination by concours, for admission to the Imperial Military School at Val de Grace. Here he remains one year attending upon hospital practice, and the following courses of lectures:—1. Clinical Medicine; 2. Clinical Surgery; 3. Hygiene and Military Medical Jurisprudence; 4. Diseases and Epidemics of Armies; 5. Anatomy of Regions; 6. Operative Surgery and Bandaging; 7. Chemistry applied to the Hygienic Art. The programme of lectures at this school shows that the subjects are of the most important character, and that they are taught practically. The student does not merely hear oral lectures, but has to apply the precepts to practice, under the supervision of experienced teachers. At the end of the course of instruction the student has to submit to a thorough examination in the branches which he has pursued, and if found unqualified, he is not allowed to enter the service. In other European countries the army surgeon is selected with even more care, and his preparation for active duty is more complete. But the point to which we wish now to call attention is this: The candidate for position in the medical department of the army must have first passed the civil school, and have received its testimonial of fitness for civil practice, before he is allowed to enter the military school. The military medical education is therefore superadded to the civil medical education, and necessarily therefore, the army surgeon, fully qualified by education for his position, must take a higher professional rank in the medical service of the army than the civil practitioner who enters that service without any previous preparations. We do not mean to say that the military surgeon should take, by virtue of his education, a higher rank in a simply professional sense, but that when the civil practitioner enters directly upon service in the medical staff of the army, he should take rank subordinate to the qualified military surgeon.

This question is now taking a practical shape in our volunteer army, and we have thrown out the above hints as aids to its solution. We have intimations from various quarters that where the surgeon of the regular army service is brought in contact with the surgeon of the volunteer forces, the latter has regarded himself as superior by education, and better qualified by civil practice for the duties of the camp, the field, and the hospital, than the former. Waiving individual examples, where the civil practitioner is more competent than the military surgeon for the discharge of the duties of the latter, the rule would neither be just nor safe which made the latter subordinate to the former; for the civil practitioner enters the province of the military surgeon, and, however distinguished his former sphere, is unlearned, and will at first prove unskilful in this new service. We hold it therefore to be the duty of the surgeons of the volunteer regiments to yield to the surgeons of the regular army that deference to which they are entitled both by education and long experience.

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CLINICAL INSTRUCTION.

Of all the various branches of medical study the one which will be found of most service to the medical practitioner, in the daily walks of his professional life, is a systematic and thorough course of clinical instruction during his early pupilage—the cultivation of a faculty of applying principles to practice. The theory of medicine must of necessity form the basis of such a system of training, but it is only the basis. Disease may be never so well described in the text-book, every single feature of the case may be given with a marvellous precision, but what does it all avail to him who has never seen the disease itself, and who has not been able to profit by the eloquently impressive language of the face, the characteristic temperature of the skin, and the significant throbbings of the pulse?

The medical teachers of the present day are gradually commencing to pay that amount of attention to the subject which its intrinsic value demands, and we consequently find that there are daily increasing facilities for studying disease in the only legitimate way, viz. by attendance upon hospitals, college cliniques, and dispensaries. As a consequence the necessity for Americans to visit England and the continent, for purposes of general study, is fast becoming less and less urgent. Except perhaps to the prospective specialist, we cannot see but that our present modes of instruction in this department of medicine, especially in the large cities, are fully sufficient to meet the wants of all.

The kind of clinical teaching which, in our view, is beyond all comparison the best, is that which takes the student to the bedside in the hospital ward. It is here, and here alone, that he is enabled to mark the progress of disease from day to day, and compare his notes with what is taught him in his text-book. The college clinique and dispensary, on the other hand, are wanting in this particular advantage, inasmuch as, by the necessarily transient character of the patients, the results of treatment are very imperfectly known, and the only substantial value which they possess to the student is the opportunity to cultivate the faculty of diagnosis.

Within the past two or three years a new feature of clinical instruction has shown itself in and about New York, which commends itself to every one who wishes to study theory and practice together. We refer to the combination of a medical school with a hospital. We have no doubt but that the good example set by the Long Island College Hospital and the Bellevue Medical College will soon be followed by the other institutions throughout the land, when the benefits of the system shall have convinced the medical public of its great practical utility.

We are somewhat surprised, in view of the acknowledged practicability of clinical instruction, that it is not more insisted upon as a requisite for graduation in medicine. In this respect we certainly have to learn a very important lesson from our professional brothers on the other side of the Atlantic. This is a subject concerning which there has been, from time to time, a great deal of discussion in our learned bodies; but, notwithstanding the acknowledged merits of the question, until lately no decisive steps have been taken in the proper direction. It is, perhaps, needless here to state that the credit of initiating the only practicable plan is due to the two institutions before named. It is too often, with shame be it said, that the medical student, having passed the requisite examination by the Faculty of a Medical College, is allowed to go forth to practise, with all the privileges of a properly educated physician, without having had any other opportunity of studying actual disease than that offered by a meagre college clinique. In times gone by, when no other facilities for practical instruction were offered, and when the means of the student would not allow him the privilege of instruction abroad, we were compelled to be satisfied with such poor qualifications; but now we maintain that such ignorance is unpardonable, and is a crying reproach to those upon whose authority this conceited class of individuals are let loose upon the world only to lower the true dignity of legitimate medicine by a system of empiricism. The community have a right to ask protection from such individuals.

This brings us to the consideration of another point in connexion with the general subject, and that has reference to the necessity of every graduate of medicine, who finds it possible so to do, becoming an interne in some hospital. Here he learns in a measure to exercise his self-reliance, and is, as it were, in active practice, with, however, the great advantage of having a competent adviser, who is always ready to aid him with his counsel in an emergency. As to the amount of good which will result from this, so to speak, extra training, it is absolutely incalculable when he is engaged in active practice; he starts in the race with an advantage over the new graduate which can only be equalled by long years of experience; his thoughts are directed in the proper channel, and his advancement is as easy as it is rapid.

While we rejoice over the increasing appreciation with which clinical instruction is being received, we cannot refrain from expressing our regret that the time-honored custom of allowing the student to make an occasional visit with his preceptor, is so generally falling into disuse in our large cities. We dare not ask how many students, well educated in other respects, have been denied this privilege, throughout the whole of their college career, by our fashionable metropolitan preceptors. We are aware that the utility of this measure is questioned, not only by the great advantages offered by the hospitals and cliniques, but the impracticability of following up the practice in a large city. These objections certainly hold good to a certain extent, but we claim that the student has a right to ask now and then for an opportunity of seeing a private patient with his preceptor, to be enabled thus to cultivate an easy manner in the sick room, and afterwards to talk over the case in a familiar manner, to ask practical questions, which perhaps he would hardly think of sufficient importance to bother the professor with. A student may have had every clinical advantage except this, and when the time comes to visit his first private patient, he appears at a great disadvantage, not unfrequently owing to the want of an easy deportment—an item of no small importance in an obstetric practice. All this could have been remedied by an opportunity of knowing about the "little nothings" which can be best learned as we have suggested.

One word in reference to cliniques and dispensaries in a charitable point of view. It needs no argument to prove that too many avail themselves of the privilege of these charities, who, as far as pecuniary capabilities are concerned, are not entitled to them; and yet we see such persons constantly presenting themselves for advice, and obtaining it without the least difficulty. These charities are for the needy, and the needy alone; and it is in the power of those in authority to remedy a gross abuse to our professional generosity. We hope that it will be only requisite to call the special attention of those in charge of such patients to have a speedy remedy.

In treating thus cursorily of the subject of clinical teaching, it has not been our purpose to lay down any special rules for the guidance of the student or practitioner. We hope to avail ourselves of an opportunity to do so in future. We have only to ask, in conclusion, that each one will think over the few hints that we have thrown out, and ask himself seriously—Do I improve every opportunity?

THE WEEK.

WE learn from a physician resident at Havana, Cuba, now int his city, that a Royal Academy of Medical, Physical, and Natural Sciences has been organized in that city under the Government. Dr. N. GUTIERREZ is president, and Dr. R. ZAMBRANA, secretary; both of whom are prominent physicians in the island. Among the fellows of the Academy, are the celebrated chemist, REYNOSO; the well known naturalists, POEY and GUNDLACH; the engineer FERNANDEZ DE CASTRO, author of valuable works on Electricity, Railroads, etc. The venerable philosopher, J. DE LA LUZ CABALLERO, whose life has been devoted to the propagation of sciences in Cuba; and J. A. SACO, first professor of physic there, and a learned publicist, are honorary members of the Academy. This Society, according to its regulations, will confer titles only upon scientific men, and will likewise institute several annual prizes, to be competed for by men of all nations, their subjects being unsettled questions of science. A Journal will publish the memoirs presented to the Academy and report its meetings.

LIVERPOOL (England) affords one of the most striking examples of the benefits of a sanitary police, on record. In 1847, when the Public Health Act first went into operation, this city was one of the most unhealthy in England, the rate of mortality being 1 in 30 of its inhabitants. Since that date, the town has been under a thorough sanitary surveillance; it has expended upwards of $10,000,000 in improvements directed by its health authorities, and the most beneficial results now begin to appear. Dr. DUNCAN, the medical officer of health, has just issued his annual report, from which it appears that the rate of deaths was 1 in 41, representing for last year, alone, a saving of not less than 3,800 lives; or about *five lives* in every 1000 living were saved. If *typhus* had been as fatal in Liverpool last year as formerly, there would have been 900 deaths from this disease alone; but there were only 359. There were 8 deaths from small-pox during the year, and not more than 11 had been recorded since May, 1859. What a striking contrast does Liverpool now present to New York, which, for the *week* ending June 29, reported 30 deaths by small-pox. These two cities illustrate forcibly the importance of proper health regulations and qualified officers; the former, under its energetic Board of Health, is becoming one of the healthiest cities in England; the latter, destitute of a sanitary police, is rapidly sinking to the level of the unhealthiest cities on the globe.

STATEMENTS have lately appeared in the daily papers designed to reflect severely upon the management of the Hospital at Fortress Monroe, in charge of Dr. GILMAN KIMBALL, late of Lowell, Mass. We have learned from various sources that the relations of Dr. KIMBALL with other medical officers in this department were not pleasant, but with that we have nothing to do. We refer now to the charges of maltreatment of patients which have been made by newspaper correspondents, and finally by two nurses of that hospital, which are designed to place Dr. KIMBALL and his assistants in a very unfavorable light before the community. To our minds this statement bears the evidence of its injustice on its face. For the alleged cruelty was without provocation; and it is unreasonable to suppose that physicians and assistants would thus combine against a helpless patient. Again, scenes frequently occur in hospital practice, and especially in the treatment of surgical diseases, which, to one unfamiliar with them, seem cruel and unnecessary. Occasionally the surgeon is obliged to resort even to anæsthetics to overcome a patient and enable him to perform necessary operations, or apply needful dressings. It is more probable that the nurses were incompetent, and unfit to have charge of surgical cases.

In another column will be found the description of a "Brigade Case," designed by Dr. Hewit, of this city, late of the U. S. Army. It combines in very convenient form every variety of instrument which the emergencies of the field can require, and seems to us well adapted for the Brigade Surgeon.

We have already published the Plan of Organization of the Sanitary Commission of the U. S. Government. This commission is now in full successful operation; and the good fruits of its labors are beginning to appear. From what we learn of the movements of the Commission, we are more impressed with the grandeur of its mission, and the energy and wisdom with which it pursues the noble objects detailed in its plans. In another column will be found an interesting report by the Resident Secretary of his Examination of several of the camps in the neighborhood of Washington. We hope to lay before the profession, from time to time, the reports of the Commission, which cannot but be of great interest to the profession.

In a recent debate in the British Parliament, on the payment of £1,150 to the Sanitary Commissioners, Lord Palmerston made the following sensible remark:—

> "Lord Palmerston was sure the Committee would feel that nothing was more important than the preservation of the health of the army. Putting it on the lowest grounds, there was nothing so uneconomical and so prodigal as carelessness on this point. But in reality it stood on higher ground, because if men were enlisted for the service of the country, the Government was bound to take due care of their lives. When a large number of persons were crowded together in barracks, or in camp, there was until lately much ignorance as to the principles on which the preservation of health depended. Dr. Sutherland was the first to examine into these principles. He had rendered invaluable service in the Crimea, as well as in the different hospitals and barracks of this country, and no money could be better laid out than in guarding the health of the soldier from the influences to which it was subjected."

A Lady who has taken courses of lectures on Materia Medica and Chemistry at the School of Middlesex Hospital, London, has applied for admission to the other lectures. She offers to endow the school with £2000 to found a Female Medical Scholarship; but the students protest against her admission to lectures, and the medical sentiment seems to be against her. The *Lancet* thus discourses on the event:

> "We all know how far enthusiasm may blind the eyes of those whom it influences; and this lady may be pardoned for being led to overlook the extreme inconvenience of her position, although so palpable to others. It is possible that, under the influence of a purely scientific and theoretic impulse, she might attend, with steeled and modest indifference, courses of lectures in which organs and functions are habitually demonstrated and discussed, such as cannot, in the opinion of the students and lecturers, or in our opinion, be prudently exposed in the presence of a mixed audience. It is only an evidence of this perfect abstraction and scientific earnestness that this lady is able calmly to go through the manipulations of sounding for stone in the male bladder; and it is probable that she might voluntarily pass through ordeals of a yet more trying nature with an equally successful impassibility. We repeat, that a universal feeling of respect prevails for the character, intentions, and demeanour of this lady. But even with these advantages, and while invested with the peculiar sanctity which guards her as an apostle and in some sense a martyr in behalf of her weaker sex, of whom she seeks to vindicate the rights, her presence gives rise to incidents necessarily painful to others; and the success of her attempt, if it popularized the movement, could not fail to be yet more compromising. When all that can be said in favor has been heard, there will remain the unalterable sense of impropriety in mingling young women with young men in classes destined to hear and see daily sights, descriptions, and explanations, which cannot be endured by men in the presence of women, without a violation of all the relations of sex which are essential to the well-being of our social system, as at present framed."

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

By E. H. JANES, M.D.

"The Etiology of Cholera, gleaned from the Pages of its History, with Practical Remarks."

An article in the *Madras Quarterly Journal of Medical Science*, by George Bidde, M.D., Civil Surgeon, Guntoor, contains the following interesting conclusions. I. Cholera has its origin in a focus of the disease, and follows in its progress the stream of human intercourse. II. Cholera is most widely diffused, and most fatal in its attacks, in localities where the laws of hygiene have been violated. III. The origin of cholera does not depend on season, or any meteorological conditions. IV. When admitted from without into a circumscribed locality, such as a prison, hospital, poor-house, on ship, it then, and rarely at any other time, attacks the healthy there. V. The liability of individuals to be affected by cholera, is in proportion to the amount of their exposure to the focus of the disease. VI. Different races of men differ in their susceptibility of being affected by cholera.

Although cholera seems to be propagated from case to case, by some subtle influence emanating from a focus of the disease, he says this does not depend on the agency of touch, or on an atmosphere tainted by emanations from the bodies of the sick, or any of the ordinary means by which infectious diseases are perpetuated. He therefore claims that the poison exists in the rice water stools, and that it becomes active or is developed during the decomposition of the animal matter of which they consist. Some highly interesting experiments are related in elucidation of this subject. One important historical fact supporting this theory is, in an overwhelming number of instances, other things being equal, it was ascertained that those who visited privies containing choleraic discharges were seized with cholera, while those visiting other privies where no such deposits had been dropped, remained in a state of health. The practical observations deduced are:—1st, The stools of cholera patients should be received in some metal or stone ware vessel, removed at once from the neighborhood of human beings, deposited in a trench two feet deep dug in the ground, and covered with a layer of charcoal. 2nd, If a succession of cases occur in a hospital, a succession of trenches must be opened and filled up, no one trench being left open for a longer period than five hours. 3rd, Such clothing, bedding, etc., as may have become soiled with the discharges, ought to be burned without delay. 4th, Cots being soiled should be thoroughly washed with water containing *calcis chlorinati liquor*. 5th, The same remark applies to the floor of a hospital. 6th, During the prevalence of cholera in a barrack, the tubs of the common privies ought to be emptied out and cleaned three times a day, and their contents each time deposited in a trench to be shut up at once. 7th, Charcoal used as a disinfectant should be destroyed by being buried in the earth.

Chylous Urine.

Among the many interesting cases published in the above-mentioned Journal, is one of chylous urine of three years' duration. The patient, at length coming under treatment for rheumatism, which was treated with the iodide of potassium, it was observed that after a few doses, the urine became copious, and natural in its general characters. The patient having quite recovered from his rheumatic attack, and the medicine being discontinued, the urine became again decidedly chylous. Having noticed the effect the iodide had on the urine, the patient submitted to a continuation of the same treatment for his long standing complaint, and was accordingly ordered five grain doses three times a day, given in two ounces of bitter infusion, the diet regulated by reducing the quantity of fatty and oily matters hitherto usually taken, and moderate exercise in the open air recommended. The treatment was continued twenty-seven days, by which time the chylous state of the urine quite disappeared.

Sanitary Commission.

REPORT OF THE RESIDENT SECRETARY,

OF A PRELIMINARY SURVEY OF THE CAMPS OF A PORTION OF THE VOLUNTEER FORCES NEAR WASHINGTON.

To the Sanitary Commission.

Gentlemen: Your Resident Secretary has inspected twenty of the volunteer camps during the last ten days. Of most of these his examination has been cursory, his object being to acquire some knowledge of the ordinary and average condition of the force, to enable him the better to direct subsequent inquiry, rather than to personally make an exact survey of the condition of each regiment. Of some few, however, his examination has been thorough, while from others he has received reports of inspections made under his instructions with a view to obtain precise information. Considerable confidence can therefore be placed in the general conclusions as to matters of fact, which will be expressed. The camps of the Rhode Islanders and of the 71st and 12th New York militia have not been visited, because it has been understood that their condition was exceptional, and no time could be spared from more general duties for the purpose. The Resident Secretary has also endeavored to make himself acquainted with the character of the supplies furnished, and with the manner of their distribution. Having been accompanied in most of his visits by Dr. Harris, the Resident Secretary will omit, as far as practicable, observations on the distinctly medical condition of the forces, presuming that Dr. Harris, on his return from Fort Monroe, will present a report on this topic.

Situation and Drainage.—The camps, generally, are favorably situated as to natural surface drainage. In many cases, not the slightest artificial drainage has been arranged; in others, surface-drains have been dug on one or two sides of a tent, or a line of tents, but an outlet entirely neglected, and this, sometimes, where an hour's labor of a man would have formed one. The drains are consequently ineffective. A complete system of drains, such as should have been laid out and made in the very hour the tents were pitched, can scarcely be found in any camp. In consequence of this neglect, during a recent sudden heavy rain at night, it is reported that water stood two inches deep in the tents of many camps. In respect of drainage by filtration, the quality of the soil and subsoil varies too much to allow any general statement to be made. The camps are generally on open ground, but some of them in the shade of woods, and the latter seem generally considered to be the more fortunate sites. Looking to the health of the men, this is unquestionably a grave error, of which evidence abounds. It is an advantage, however, to have a shaded place for drill near the camp, as is sometimes the case with those on the open ground. The tents are placed much closer together than they should be; closer than is usual in camps of regulars, unless under special circumstances. The site of the camps is selected by an officer of the quartermaster's department, not by the regimental officers. Night-soil has been recently deposited in large quantity within a short distance of several of the camps, and between them and the town. This has occurred because the scavengers have been unable to pass the lines of sentries at night. Immediately on learning this, a note was addressed by the Secretary to the mayor of the city, and a communication obtained with the health officer, who readily promised that the practice should be avoided. The use of cheap disinfectants was recommended to him to be applied to the night-soil already deposited near the camps.

Malaria.—There have been but few cases of intermittent fever found; three in one regiment is the largest number; this camp was situated near a pond.

Sun-Stroke.—A few cases have occurred in almost every encampment. The men are generally provided with "havelocks," which are worn or dispensed with according to the caprice of individuals. Even at the dress parade in most regiments, each man wears a havelock or not, at his pleasure. The havelocks, as generally made, are of little use. The article worn by the Indian troops, pictures of which probably suggested that termed in America the havelock, is quilted and stiff, resting on the shoulders, and thus kept open, clear of the ears, and allowing a free circulation of air beneath. Men who have been drinking freely of water when on a march, or at drill, are the most frequent sufferers from sun-stroke.

Water.—Water, of good quality, is generally found in abundance near each camp.

Tents.—The most common tent is a poor affair, being similar in form to the French *tent d'abri*, but without its advantage of portability. The common wall-tent is also largely used, and is much better. During the day the walls are triced up, and the tent is well ventilated; but at night, if the walls are lifted, or the flaps opened, the drift of the dew-laden wind across the men sleeping on the ground is felt to be severely cold. In most cases therefore—the officers paying, apparently, no attention to the matter—the tents are closed as tightly as possible at night, and are crowded full of sleepers, six to eight and sometimes ten men being found in each. Of course they breathe a most vitiated atmosphere. Those who are most sensitive to this are sometimes forced out of the tent; and in a camp visited at night, the Secretary discovered that many men were sleeping on the ground, without any protection from dew or malarious influences. This had not been regarded, and apparently was unknown to the regimental officers. The wall-tent, when provided, as it is sometimes found to be, with large square openings at the end, with flaps to button over them when necessary, is the most comfortable tent for summer. This, or some other opening for ventilation, well above the ground, should be provided in all cases. The "Sibley" is, however, much the best tent for all purposes, and it is to be hoped that it will rapidly displace all others. It is easily ventilated, and at the same time supplies the best protection to its occupants during inclement weather. The men generally sleep on a single blanket spread upon the ground. The regiments sent by the New York Union Defence Committee, and some few others, are provided with india-rubber tent-floors, or blankets, and in some cases the tents are furnished with plank floors. These, which would otherwise seem to be best for a fixed camp, afford an unfortunate facility for the accumulation of unwholesome rubbish. Where there are no floors, loose straw is sometimes used, and in other cases straw in sacks.

Sinks.—In most cases the only sink is merely a straight trench, some thirty feet long, unprovided with a pole or rail; the edges are filthy, and the stench exceedingly offensive; the easy expedient of daily turning fresh earth into the trench being often neglected. In one case, men with diarrhœa complained that they had been made sick to vomiting by the incomplete arrangement and filthy condition of the sink. Often the sink is too near the camp. In many regiments the discipline is so lax that the men avoid the use of the sinks, and the whole neighborhood is rendered filthy and pestilential. From the ammoniacal odor frequently perceptible in some camps, it is obvious that the men are allowed to void their urine, during the night at least, wherever convenient.

(To be continued.)

Recent Inventions.

DESCRIPTION OF THE "BRIGADE CASE,"

DESIGNED BY

H. S. HEWIT, M.D.,

FORMERLY ASSISTANT SURGEON, U. S. A.

And respectfully submitted for the approval of the Medical Staff of the U. S. Army.

The case described below is one designed by the writer to meet a surgical want hitherto unsatisfied. It is intended to contain every instrument which can be useful in any emergency, and, with the instruments already in possession of the staff, will furnish a complete *armamentarium chirurgicum.*

It consists of the following instruments:—

For Amputations.—Four amputating knives; two amputating scalpels; one amputating tenaculum; one capital saw; one finger saw; two spiral tourniquets.

For Trephining.—Two trephines; one Hey's saw; one elevator.

Forceps.—One Liston's straight bone forceps; one Isaac's bayonet do.; two Lüer's bone-gnawing forceps; one Strohmeyer's stumpholding forceps; two tooth forceps; two Lüer's artery forceps; one torsion forceps; one thumb forceps; one mouse-tooth forceps.

Saws.—One Strohmeyer's saw; one saw à dos mobile; one saw guard.

Trocars and Catheters.—One curved rectum trocar; one straight trocar; one partition catheter; five silver catheters, 1, 3, 5, 7, 9; one silver catheter for prostate, 12; one steel staff grooved; twelve English flexible catheters.

Needles.—One Mott's artery needle; one right Deschamps' artery needle; one left Deschamps' artery needle.

Bistouries and Scalpels, &c., &c.—One sharp-pointed straight bistoury; one probe-pointed straight bistoury; one probe-pointed curved bistoury; one sharp-pointed curved bistoury; one hernia bistoury; four scalpels; one tenaculum; two double hooks, sharp; two double hooks, blunt; two retractors; one pair of Musseux's forceps; one pair of polypus forceps; one pair of dressing forceps; one pair of heavy straight scissors; one pair of ordinary straight scissors; one pair of curved scissors; one silver director; one steel director; one Schleswig bullet forceps; one Hamilton's bullet forceps; two double trachea tubes; one Lüer's articulated œsophagus tube; one wire suture needle; two eye needles; one vaccinating scarificator; one hard rubber four-ounce syringe; silver probes, wire, and suture silk.

It will be observed that amputating, trephining, resecting, and artery instruments are here comprised, together with tracheotomy tubes, trocars, and the silver suture needle.

The dimensions of the case are, length, 18 inches; breadth, 13¾ inches; depth, 2⅓ inches. The weight is 19¾ pounds, and with the containing leather valise, like case, will be upwards of thirty pounds.

It is intended that the exterior case shall be made five inches in depth, the lid to contain rollers two and a half inches wide by seven yards long, placed on end, and lint, cerate, oil, chloroform, and sponges, so that with this case occupying no more room than a common travelling valise, any amputation, resection, ligature, or other operation can be performed, or any wound dressed except those requiring splints.

The undersigned respectfully recommends that one case similar to the above be furnished to every surgeon and medical director of the regular army, and to every brigade surgeon of the volunteer forces.

The case itself is made of tin, japanned, and is as compact and light as a complete case can be made.

It is not intended for hand transportation, excepting for short distances. It is of convenient size for any other conveyance or for packing.

The instruments have been made and arranged by Mr. Jules Teincken, of Astor Place, agent for A. Lüer, of Paris, whose name alone is a guarantee of excellence of material and workmanship.

The present aspect of surgery, and the experience of the Schleswig-Holstein war and the Crimean war, urge imperatively upon all military surgeons the cultivation, according to their means and circumstances, of conservative surgery. The above case furnishes all the instruments necessary for resecting bones or joints, excepting the chain saw, which has been omitted on account of its extreme liability to get out of order. The saws in the case, it is believed, will answer every purpose of the chain saw.

The long, hollow, silver suture needle is added under the belief that silver or other metallic sutures are destined to occupy a high place in both ordinary and conservative surgery. It is the intention of the writer to make trial of the silver thread if he has opportunity (silver wire twisted over silk) both as ligatures and sutures, and report the result.

The high claims of the profession, the future of medical and surgical science, and the great and ever present cause of humanity urge the profession, both military and civil, to high heroic and noble enterprise.

Let us see that history record that no life or limb was sacrificed in the present war which sanitary science and foresight or surgical skill could have saved; and let our profession seize the present glorious opportunity to demonstrate its value and utility in times of real danger and distress. If quackery hereafter has a front to show, it will be simply our own fault.

Correspondence.

KEROSOLENE.—A NEW ANÆSTHETIC AGENT.

[To the Editor of the American Medical Times.]

Sir:—Boston again claims the honor of discovering an anæsthetic. But this time neither Jackson nor Morton is the happy discoverer of this new letheon, therefore there is no special danger of a patent. In answer to your inquiries, I cannot at present afford a more satisfactory account than is given by Dr. H. J. Bigelow, in the following letter to the *Boston Journal*;

"Messrs. Editors:—In reply to your request for information concerning the 'kerosolene,' and although the evidence is incomplete, I see no impropriety in my furnishing you with such observations as I have been able to make since its introduction to the Medical Society last evening, by Mr. Merrill, Dr. Dickinson, and Dr. Bowditch, as an untried agent of suspected anæsthetic properties, which had accidentally affected a man sent in to clean a cistern at the kerosene works, and which had been afterwards tried on flies and mice.

"This fluid presents remarkable properties. It is tasteless as water, volatile and inflammable as ether, though burning with a dense white light; of a faint chloroform odor, which, as it evaporates, changes to that of coal tar, and then disappears absolutely and altogether; so that a handkerchief saturated with the fluid has, at the end of a few minutes, when dry; no odor at all, nor has the room or atmosphere where it has been used, any trace of its presence. Both ether and chloroform leave, in different degrees, a persistent, *fade*, and stale aroma after evaporation, as is well known. They are also far less agreeable to inhale than this new agent, which has thus an obvious advantage over either of them. A few whiffs were sufficient assurance of its efficacy as an anæsthetic, which, with its other qualities, as I ventured to remark, would place the kerosolene beyond any known anæsthetic, provided its use was not followed by headache, vertigo, or other unpleasant symptoms, and provided it should prove as free from danger as ether. Subsequently, I inhaled the new vapor, which Dr. Hodges at my request administered. Complete insensibility supervened, lasting several minutes, with some diminution of the volume of the pulse. Its effect was wholly agreeable, leaving neither headache nor nausea, nor bad taste.

"I have this morning administered it to three surgical patients. The first, a girl of nineteen, presenting some hysteric tendencies, having thrust some twenty needles in her leg, was wholly insensible during the extraction of four of those which remained. Yet there was more cough than I had expected from the wholly unirritating odor of the vapor, more muscular rigor than usual in favorable anæsthesia, and more intermittence of the pulse. In a second patient, to whom it was given preparatory to an operation upon the face, insensibility was equally complete. But this woman did not take it kindly, and its complete effect was attended by so feeble and intermittent a pulse as to lead me to desist until she had recovered. A second attempt reproduced, with anæsthesia, the feeble and intermittent pulse, and I again desisted. Upon her recovery, I gave her common ether vapor, which she afterwards said was less agreeable, but which was followed by complete insensibility, the pulse beating steadily and full, at seventy-six. Though this patient perhaps succumbed more readily to a third anæsthesia, there seemed to be in the two first trials a certain degree of color and asphyxia, with its attendant spasm, which I have elsewhere described as an occasional and disagreeable symptom of attempted anæsthesia. To guard against this asphyxia, which might possibly have resulted from the folded towel, upon which I habitually administer ether, I tried in the next case an open sponge. The subject required a considerable incision for a mammary abscess, and was a patient of Dr. H. G. Clark, with whose assent I tried the kerosolene. In spite of the open sponge, the symptoms of asphyxia again appeared, suggesting to Dr. Clark before operating their resemblance to those resulting from charcoal gas. The color was livid, and the rigidity marked. In each of these cases, the quantity used was from one to two ounces.

"In conclusion, it may be remarked of these three cases, that they are insufficient for satisfactory demonstration, and that their common and unfavorable symptoms may well have been but a coincidence; yet they suggest some caution in the use of the kerosolene vapor. It is probably more potent than that of ether, requires a free admixture of air, and may produce upon the system some impression or influence, other than that of the mere intoxication attendant upon the use of ether. In awaiting further evidence, it may be considered established that kerosolene is an anæsthetic of undoubted efficacy, and that it possesses certain remarkable and attractive properties peculiar to itself."

J. C. O.

A GRADUATE FROM A NEW YORK MEDICAL COLLEGE AFTER TWO YEARS' STUDY.

[To the Editor of the American Medical Times.]

Sir:—A medical student of this place consulted me last fall, in regard to the advisability of attending lectures in a neighboring College, where he had already taken one course. He was in doubt as to the best course, because by the end of the term only about *two years* would have elapsed from the time of commencing his studies, a fact of which the Professors of the College were aware; he could not, therefore, graduate, and would be obliged to attend three courses. What may have been the reasons for the course he took, I cannot say, but I know that he returned here this spring with the diploma of one of the *oldest* schools of your city, and is now occupying a public appointment upon the strength of that diploma, although it is evident that he is unqualified.

Now, sir, I suppose there is no hope of redress in such a case as this, either for the profession or the Western college, to both of which great injustice has been done, but I have thought that, perhaps, the facts had better be laid before the profession. Ohio.

July 10, 1861.

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CORRECTION.*

[To the Editor of the American Medical Times.]

795 Broadway, New York, *July* 24, 1861.

Sir,—In your issue of July 20th is an article on "Improved Splint for counter-extension in Morbus Coxarius, by Dr. Chas. F. Taylor," in which he states, "I constructed an instrument, in the latter part of last year, with a branch passing from the external splint over just above the knee to the inside of the thigh," &c; and in the concluding paragraph of his article, after claiming various improvements, &c., says:—"And I am forced to do this from the fact that the Medical Times, in its issue of June 29th, had an instrument figured as the improvement of Dr. Sayre, which the reader cannot have failed to notice, is, so far as the contrivance for receiving the adhesive strap from the inside of the thigh, substantially identical with the one here described. This improvement was first shown by me to Dr. Sayre, after I had used it several months, and he has adopted it without giving me the proper credit."

Dr. Taylor first showed me his instrument about the 1st of February, 1861; whereas it will be observed by the following correspondence that my instrument was exhibited at Bellevue Hospital at the time of my lecture on Hip Disease, in December, 1860; and I had constructed it some time previous to that period at the suggestion of Dr. Mason.

As the Lecture was not published until June 29th, 1861, it is possible that Dr. Taylor fell into his error by not observing the date of its delivery.

I called upon Dr. Taylor as soon as I had read his article, knowing that he would correct the error as soon as it was explained to him, but finding him absent from the city, and that he would not return for some weeks, I have deemed it but justice to myself to correct this false statement.

795 Broadway, *July* 22, 1861.

Dr. Mason, House Surgeon Bellevue Hospital.

Dear Sir—Will you be kind enough to give the date of the case of *Morbus Coxarius*, in Dr. Crane's wards, and for which you suggested to me to alter my instrument so as to make extension from above the knee only, and also the date of my lecture on that subject, in which I exhibited the improved instrument.

Respectfully yours, &c.,

Lewis A. Sayre.

Bellevue Hospital, New York, *July* 23, 1861.

Dr. Sayre.

Dear Sir—The time I first made the suggestion to you to make the extension from above the knee in your apparatus for the treatment of Hip Disease, was about the middle of September, 1860. The apparatus thus modified you showed to your class at Bellevue Hospital the middle of December, 1860.

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* It is but proper that we should state that the Lecture of Dr. Sayre has been in our possession since the early part of January, and that its publication was delayed by a pressure of matter.—Ed.]

Yours respectfully,
Erskine Mason, M.D., House Surgeon.

Further comment is unnecessary. You will oblige me by giving this an insertion in your next issue.

Respectfully, your obedient servant,
Lewis A. Sayre.

Army Medical Intelligence.

SURGEONS AND ASSISTANT SURGEONS OF THE REGIMENTS IN THE BATTLE OF BULL'S RUN, VIRGINIA,

July 21, 1861.

Medical Director, W. S. King; Assistant, David L. Magruder.

FIRST DIVISION.

First Brigade.—*First Regiment Connecticut Volunteers.* Surgeon, C. P. Stearns; Surgeon's Mate, Frederick Dibble. *Second Regiment of Connecticut Volunteers.* Surgeon, A. T. Douglas, M.D., of New London; Surgeon's Mate, Francis Bacon, of New Haven. *Third Regiment Connecticut Volunteers.* Surgeon, John McGreggor, of Thompson; Assistant Surgeon, Matthew T. Newton, of Suffield. *Second Regiment Maine Volunteers.* Surgeon, William H. Allen, of Orono; Surgeon's Mate, A. C. Hamlin, of Bangor. *Second Regiment, New York State Militia.* Surgeon, Dr. A. Powell; Assistant Surgeon, S. E. Ferguson.

Third Brigade.—*Sixty-Ninth Regiment, New York State Militia.* Surgeon, Dr. Kiernan. *Seventy-Ninth Regiment, New York State Militia.* Surgeon, James Norval, M.D. *Thirteenth Regiment, New York Volunteers.* Surgeon, — Little; Assistant Surgeon, — Avery. *Second Regiment Wisconsin Volunteers.* Surgeon, J. M. Lewis.

Fourth Brigade.—*Second Regiment Michigan Volunteers.* Surgeon, Alonzo B. Palmer; Assistant Surgeon, Nathan Webb. *Third Regiment Michigan Volunteers.* Surgeon, D. W. Bliss; Assistant Surgeon, Z. E. Bliss. *Twelfth Regiment New York Volunteers.* Surgeon, R. W. Pease; Assistant Surgeon, G. B. Todd. *First Regiment Massachusetts Volunteers.* Surgeon, Richard H. Salter, of Boston; Assistant Surgeon, Samuel A. Green, of Boston.

SECOND DIVISION.

First Brigade.—*Eighth Regiment New York State Militia.* Surgeon, Dr. Dalton; Surgeon's Mate, T. R. Smith. *Fourteenth Regiment New York State Militia.* Surgeon, Captain J. M. Homeston; First Assistant Surgeon, Lieutenant J. L. Earley; Second Assistant Surgeon, F. Swalm. *Twenty-Seventh Regiment New York Volunteers.* Surgeon, Barnes; Assistant Surgeon, Morse.

Second Brigade.—*First Regiment Rhode Island Volunteers.* Surgeon, Francis L. Wheaton, Prov.; Surgeon's Mate, Henry H. Rivers, Prov.; Surgeon's Mate, George W. Carr, Providence. *Second Regiment Rhode Island Volunteers.* Surgeon, Francis L. Wheaton. *Seventy-First Regiment New York State Militia.* Surgeon, Dr. McMillan; Assistant Surgeon, Dr. Dodge; Second Assistant Surgeon, Dr. Peltnet. *Second Regiment New Hampshire Volunteers.* Surgeon, George H. Hubbard.

THIRD DIVISION.

First Brigade.—*Fifth Regiment Massachusetts Volunteers.* Surgeon, J. W Hurd; Assistant Surgeon, Wm. W. Keen, Jr., M.D., of Philadelphia. *First Regiment Minnesota Volunteers.* Surgeon, J. H. Stewart; First Assistant Surgeon, C. W. La Botelier.

Second Brigade.—*First Regiment Michigan Volunteers.* Surgeon, William Brodie; Assistant Surgeon, Cyrus Smith. *Fourth Regiment Michigan Volunteers.* Surgeon, Thomas Tunnicluff; Assistant Surgeon, D. P. Chamberlin. *Eleventh Regiment New York Volunteers.* Surgeon, C. A. De Williers. *Thirty-Eighth Regiment New York Volunteers.* Surgeon, A. Berry; Assistant Surgeon, Stephen Griswold.

Third Brigade.—*Third Regiment Maine Volunteers.* Surgeon, Gideon S. Palmer, of Gardiner. *Fourth Regiment of Maine Volunteers.* Surgeon, Wm. A. Banks, Rockland; Assistant Surgeon, Elisha Hopkins, Jr., Searsport. *Fifth Regiment Maine Volunteers.* Surgeon, Buxton, of Warren; Assistant Surgeon, F. G. Warren, of Biddeford. *Second Regiment of Vermont Volunteers,* Surgeon, Newton H. Ballou, Burlington; Assistant Surgeon, Walter B. Carpenter, Burlington.

FIFTH DIVISION.

First Brigade.—*Eighth Regiment New York Volunteers.* Surgeon, Dr. Rudolph Welcker; Assistant Surgeon, Francis Staekly. *Twenty-Ninth Regiment New York Volunteers.* Surgeon, Dr. C. Neuhaus; Assistant Surgeon, C. H. Osborne. *Garibaldi Guard, of New York.* Surgeon, A. Mager. *Twenty-Seventh Regiment Pennsylvania Volunteers.* Surgeon, P. Heller; Assistant Surgeon, M. Heller.

Second Brigade.—*Sixteenth Regiment New York Volunteers.* Surgeon, W. H. Crandall; Assistant Surgeon, John H. Moore. *Thirty-First Regiment New York Volunteers.* Surgeon, Dr. Frank H. Hamilton; Assistant Surgeon, Dr. Lucien Damainville. *Eighteenth Regiment New York Volunteers.* Surgeon, W. Van Ingan; Assistant Surgeon, Edmonson. *Seventeenth Regiment New York Volunteers.* Surgeon, J. C. Stewart; Assistant Surgeon, A. B. Shipman. *Thirty-Second Regiment New York Volunteers.* Surgeon, Wm. B. Little; Assistant Surgeon, G. T. Totten.

Fate of Surgeons in the Battle of Bull's Run.—*Wounded*—Surgeon N. S. Barnes, of the 27th Regiment N. Y. Volunteers, contused wound of knee. *Prisoners*—Surgeon B. Buckstone, 5th Maine Regiment; Surgeon A. Allen. 3d Maine Regiment; Surgeon A. A. C. Williams, 1st Maine Regiment; Surgeon A. Powell, — N. Y. Volunteers; Surgeon Foster Swift, and Assistant Surgeons G. S. Winston and Charles DeGraw, 8th N. Y. State Militia.

A morning paper says of the Surgeons of the 8th Regiment N. Y. S. M.:—

"Noble Conduct.—A notable instance of magnanimous self-sacrifice on the part of the Surgical Staff of one of our city regiments occurred in the battle of the 21st. The above named Surgeons nobly surrendered themselves to the enemy rather than desert their wounded comrades on the field of battle. Such conduct reflects the highest credit on the heroism and humanity of these officers, and deserves to be widely known and duly appreciated."

CAMP BUTLER—NEWPORT NEWS.

REPLY TO THE CORRESPONDENT OF THE BOSTON MEDICAL JOURNAL—DEFICIENCIES IN THE MASS. MEDICINE CHEST—THE KIND OF MEDICAL SUPPLIES FOR A REGIMENT WHICH EXPERIENCE SUGGESTS—MEASLES AS AN EPIDEMIC—NEED OF REORGANIZING MEDICAL DEPARTMENT OF THE VOLUNTEER ARMY—DEFICIENCY IN HOSPITAL SUPPLIES AND ACCOMMODATIONS AT FORTRESS MONROE.

[Special Correspondence of the American Medical Times.]

Shortly after arriving at Fortress Monroe with my regiment, I wrote you on some topics thought to be of interest to the profession, and particularly to those who were about commencing a course comparatively new to the American surgeon of the present age. As you are kind enough to request a continuance of the correspondence, I will give you a few items, the result of more mature observations in the peculiar department now attracting so much attention in our ranks.

Before proceeding, however, it may be proper for me to allude to a letter bearing the signature of "K," in the *Boston Med. and Surg. Journal*, questioning the truth of the statements I made concerning the insufficiency of the medical chests put up under the direction of the Medical Commission, in Boston. As the letter is anonymous, conceited in style, and every way unworthy of a gentleman, I might as well pass it over; but I simply wish to reiterate the assertion, that the chests were entirely deficient in the means of making ordinary volatile liniment, common cough mixtures, or gonorrhœa mixtures, and many other of the simple combinations so much in use by those who are familiar with practice. It may be the "habit" of the gentlemen who practise about the *Hub* to give garlic to their pulmonary cases, as the best expectorant; but I know many worthy gentlemen there, who are not afraid to write their whole names, and are in the habit of using squill, paregoric, tinc. antimonii, do. ipecac., syr. tolu, sanguinaria, etc., in various combinations, and with good effect. Possibly they do not manage "lung institutes," and are not up to garlic; or perhaps they do not know it is so easy to get at Fort Monroe! I distinctly assert that none of the above articles were in the chest, till I *bought* them, with the *ammonia* and many other things, in Vermont. Though at the expense of his argument, "K" may still find a ray of comfort in the fact, that the accident which was so nearly fatal to my life, and caused me so much suffering, was from ammonia purchased by myself to remedy the want of the Massachusetts chests. If the ammonia had been properly packed with the other medicines, it would not have been exposed to the sun, and the accident would not have occurred. I take this occasion to express my gratitude to Drs. Saville and Faxon, of the 4th Regt., Mass., to whose kind attentions I owe at least the preservation of my eyesight. As regards the question of medical supplies for a regiment about leaving for the seat of war, after an experience of three months, most of the time as post surgeon to a station with five regiments, I would make an outfit as follows: Instruments, in as complete a set as I could procure, including a great variety of *exsecting* instruments;

portable splints; field tourniquets, 3 doz.; stretchers, 3; lanterns; hospital knapsacks, 2; portable cooking stove and furniture; 25 bed sacs, narrow for cots, and changes of bed-clothing for same; napkins, towels, bandages, lint, etc., *ad libitum;* 25 each long night-shirts, of cotton and flannel. Medicines—10 days' supply, if going to encamp near a port or depot for army supplies; if not, 20 days' supply.

Instead of having medicines packed as usual, so that to make up a prescription on ship-board or in camp everything has to be unpacked, I would have portable chests, with tin cans fitted like a liquor-case, holding four or five gallons, or less, according to nature of medicines, filled with cough mixtures, liniments, gonorrhœa mixtures, and such combinations as the surgeon is accustomed to use in his private practice. The *quantity* of medicine dispensed at a surgeon's morning call, during the prevalence of an epidemic like measles, diarrhœa, etc., would hardly be believed until experienced. The same cause that gives ten men quinsy, or diarrhœa, or influenza, or intermittent, is as likely to affect one hundred; and in men so nearly alike in habits of life and circumstances as the soldier, what is good for one is the same for the whole, with few exceptions. One hundred prescriptions (and I have made them many a morning) of mixtures, and pills, and powders, for these diseases, tells on the bulk of your supplies rapidly. This method of preparing combinations is for convenience, and to facilitate dispensing when on the move. Less bulky and more powerful, and less used preparations, may be packed in the usual way.

These suggestions are too late for many; but if followed by those yet to march, will save infinite trouble. The surgeons of three months' regiments have had an experience that their successors will never have, on many accounts. One is, that the first regiments were not *inspected*, and from fifteen to twenty per cent. of the men were incapacitated for military duty, and of course filled the hospitals, and converted them into asylums for permanent invalids, from chronic disease.

Thus much by way of explanation of my last letter. I add a few items relative to medical matters at this post, which may be of interest. At the date of my last letter the 1st Regt. was stationed at Fort Monroe, and the measles had taken the form of an epidemic; there being something like a dozen cases down, mostly from three companies. About the 1st of June, the 1st Vt., with the Mass. 4th, and a corps of U. S. Engineers and Artillery, made the initial advance of this division of the army, and entrenched themselves at Newport News, on James river, about nine miles above Fort Monroe, though not in sight of the fortifications. Here we have since been joined by three additional regiments from New York, making the force now here five regiments, or about four thousand men. The form of the command is that of a post—Col. Phelps, of the Vt. Regt., being in command. The military, commissary, and medical department are now administered in this form. I mention this to show the way in which regiments organize themselves as they come together, each regiment losing in many respects its individual character, as it becomes a portion of a brigade or a post. This system, of course, has an important bearing on the position of a surgeon in the army, and is something, I think, that is very little understood in the profession. Until the whole system of the medical department of the volunteer army is reorganized, there must be a good deal of confusion among the newly appointed surgeons. For instance, under the present regulation, the senior surgeon of a post becomes the post surgeon of that station, which, under the militia system, might place the least deserving persons at the head of the staff. It is quite evident that our army cannot secure the services of the surgical talent of the country under any such trammels as now exist. The bill now before Congress for the appointment of brigade surgeons will obviate some of the difficulties that now exist relative to rank and station among the medical staff of the volunteer regiments.

The great drawback to the efficiency of the medical department in this division of the army is the great deficiency of medical and hospital supplies at Fort Monroe, which is the great depot of supplies for the army under Gen. Butler. The apathy which has been manifested in making provision for the sick at Fort Monroe is perfectly astounding. It can be called by no other name than *utter neglect.* It is nearly three months since Fortress Monroe commenced its prominent career in the present campaign, as a depot for troops and supplies for one of the main divisions of the army. There is scarcely a household in New England, indeed, that is not now familiar with every stone of the noble old fort, through the well conned letters of sons and brothers encamped around its walls. Yet up to within a few weeks, apparently not a finger had been raised to make any further provision for the sick than had bitherto been considered necessary for the small squad of men stationed here in times of peace to keep the grounds in order, and the guns from rusting. When the Vermont regiment was put ashore from the crowded transport, on the 1st of May, there were several men down with measles, and others quite sick with various complaints incidental to exposure and fatigue, and there was absolutely no way to make them comfortable. The post hospital is very small, very neat, and very regular, fit for anything but the vulgar epidemics of a volunteer army. Dr. Cuyler, U.S.A., the post surgeon, aided me to the extent of his means, which amounted to about nothing at all. Through his assistance I finally found shelter for my patients in an L of Willard's Hygeia Hotel, which was the hospital for the Vermont regiment, till they encamped at Newport News. There is but little to say about the hospital. It was shelter, for which I was very thankful. But in *all* respects, as regards situation (fronting on a court-yard and the *privies*), ventilation, conveniences for cooking, washing, etc., it was just such a place as sick men ought not to be put into. I made a requisition, as a matter of course, for bedding for the hospital. The reply was, "There is none at the post—the supplies have not yet come." In the articles of medicines the reply was very often the same—the regular supplies had not come. I soon had thirty patients in hospital, without any bedding or linen whatever, excepting twenty-five sheets and pillow-cases, and about a dozen shirts found in one of the cases furnished by the ladies of one of the towns of Vermont, for its own company. On the arrival of General Butler, a statement of the deplorable condition of the hospital arrangements was laid before him, supported by written statements of patients, representing a state of things scarcely credible. On the strength of these authenticated statements, confirming the statements of surgeons, that they entirely failed in all their efforts through the *regular* channel, to provide decent accommodation for the suffering volunteers, Gen. Butler at once, with his well known nobleness of character, gave peremptory orders that the whole of Willard's Hotel should be taken for a general military hospital, and the beds, bed-linen, &c., belonging to the hotel should be purchased for the use of the sick, he becoming personally responsible for the amount. This was the first gleam of comfort to the suffering soldiers, and the over-worked and anxious surgeon. And I have yet to see the first evidence, that but for this personal and generous bursting of the toils of red-tape, a routine that seemed to fetter my hands that should have been raised to the relief of Northern volunteers, anything adequate to the necessities of the case would have been furnished.

[The conclusion of this letter from Dr. E. K. Sanborn, Surgeon of the 1st Vermont Reg., will appear next week.—Ed.]

Royal Medico-Chirurgical Society.—This Society having failed to effect an amalgamation of the Medical Societies of London, is considering the propriety of the formation of sections, as in the French Academy, and the N. Y. Academy of Medicine.

Council of the Royal College of Surgeons.—At a recent election of three members to this body, the following candidates were successful:—Solly, Ferguson, and Mackmurdo.

Original Lectures.

A COURSE OF LECTURES ON CHANCRE,

DELIVERED AT THE BALTIMORE INFIRMARY.

BY

WILLIAM A. HAMMOND, M.D.

PROFESSOR OF ANATOMY AND PHYSIOLOGY IN THE UNIVERSITY OF MARYLAND, SURGEON TO, AND LECTURER ON CLINICAL SURGERY IN THE BALTIMORE INFIRMARY.

LECTURE V.

GENTLEMEN:—The last lecture which I had the pleasure of delivering to you was devoted to the consideration of the primary infecting ulcer, and its almost invariable attendant the indurated bubo. We passed briefly in review the phenomena and diagnostic marks of these manifestations of syphilis, and I explained to you the nature of the relation which they have to each other. There were one or two points, however, which were passed over at that time, and to these, before proceeding to discuss the treatment of the indurated chancre or the constitutional troubles to which it gives rise, I wish to direct your attention.

I have said that induration is pathognomonic of the infecting chancre; so it is, but you know how necessary it is for you to be aware of all the circumstances attending the presence of a chancre before you form your diagnosis, and how careful you must be not to mistake medicinal hardness for specific induration. Now you are liable to still other errors. 1st. The induration may have been present and have disappeared. This is a circumstance of frequent occurrence. It is exceedingly rare for this sign to vanish before the cicatrisation of the chancre; nevertheless, it does occasionally happen. Not long since a sailor applied to me with a chancre on the prepuce. He had noticed it eight days previously as a slight excoriation. There was well marked induration, not of the parchment kind, but such as Hunter and Bell described. There was a small bubo in the groin of the corresponding side. It was indurated, but so small that a cursory examination might readily have failed to reveal it. I prescribed bi-chloride of mercury and iodide of potassium internally, and a lotion of solution of tannin. In five days he again presented himself. I was surprised to find that the induration of the chancre had entirely disappeared, while the sore itself had not apparently decreased the least in size. Upon examining the groin I could detect no sign whatever of the bubo which was there five days before. The man's mouth was not at all affected by the mercury.

Had I seen this case then for the first time, I should not have hesitated to pronounce it one of soft chancre, for the other peculiar marks of the infecting chancre, though of value, are not so striking as to warrant us in regarding them as pathognomonic. The absence of the indurated base, and the indurated bubo, would have determined me. I should have made a mistake, but an unavoidable one, and you are liable to meet with similar cases. They are so rare, however, as to form no argument against the rule that a soft chancre should not be treated with mercury.

You would do infinitely less mischief by treating all chancres with soft bases without mercury than by giving this agent indiscriminately, under the idea that some of the chancres may at some former time have had induration.

2d. A soft chancre may be contracted upon the indurated nodule that remains after an infecting chancre has been healed. The previous history of the patient's disease will prevent you from making any error in such cases. You should, therefore, never fail to make such inquiries as will place you in possession of all pre-existing circumstances; as you have learned, a person never, as a rule, has an infecting chancre twice. Ricord never in all his immense experience met with such an example, and while, as I have stated to you, I am not prepared to contend for the absolute immunity claimed by Ricord, I have never seen an instance of the recurrence of an indurated chancre. But I have seen several cases in which soft chancres were developed upon an old induration. The infecting chancre gives no immunity from the soft chancre; in fact, I believe the latter are more apt to be developed upon the indurated cicatrices of the former than upon any other point. It is important to ascertain the exact circumstances connected with all such cases, with a view to the employment of suitable treatment. The soft chancre on an old induration requires the treatment which I have mentioned to you as proper for it when seated elsewhere.

3d. An old induration is liable to spontaneous ulceration. This distinction I have often seen manifested. You have recently seen an example in the case of the man in ——— ward, who was in the Infirmary last fall for an indurated chancre. He now has secondary symptoms, and the induration which has persisted since the chancre was healed (over eight months), has lately ulcerated afresh. This ulceration under such circumstances is non-specific, there is no fresh infection from it, it is not in fact chancrous, and always, so far as my experience goes, heals under the mild use of the nitrate of silver.

You will recollect that I impressed upon you the pre-eminent liability of the soft chancre to certain accidental complications, as inflammation, ulceration, and phagedena. You are not, however, to suppose that the infecting chancre is altogether free from such attacks. Though not prone to inflammation, mechanical and medicinal irritation may give rise to it, and it may be attended with great engorgement and followed by gangrene. The principles of treatment do not essentially vary from those laid down when we considered the same complication in the soft chancre, except that superadded to our special remedial measures we have those which the infected system demands.

Ulceration to an excessive extent and phagedena are not so often met with. The latter is exceedingly rare. I have, however, seen several instances of it in New Mexico. Constitutional syphilis is not prevented when the chancre is thus affected. Ricord has, I think, established this point, and my experience leads to the same conclusion. It would be contrary to all analogy if the reverse was the case. The phagedena is nothing more than a local accident engrafted upon the local manifestation of syphilis. It can have no influence upon the constitutional infection any more than the curing the chancre will prevent or abolish consecutive disease. I saw this very distinctly shown about ten years since in a female who came under my charge having an indurated chancre on the right labium, and a bubo of the same character in the right groin. During the second week after the appearance of the ulcer it became affected with phagedena. The action was very extensive, and was not arrested till the upper half of the labium was almost entirely destroyed. Notwithstanding this, secondary symptoms ensued during the sixth week, and when I saw her a space afterwards, the nasal bones and palate processes of the superior maxillary bones were nearly completely necrosed.

In one case, also that of a female, an indurated chancre existed at the angle of the mouth. Phagedena ensued, and destroyed a large portion of the cheek through nearly its entire thickness. In a few weeks secondary symptoms appeared and eventually venereal nodes on the tibia followed.

But if the infection of the individual is not prevented, the specific character of the chancre is destroyed very soon after the occurrence of phagedena. This fact I have had several opportunities of establishing, both by cases and experiments. In one instance especially, an individual who was under my charge, with an indurated and phagedenic chancre on the frænum, had daily connexion for a considerable period with two women, neither of whom contracted any venereal disease. The individual in question had well marked constitutional syphilis developed shortly afterwards.

I have also endeavored to propagate the indurated phagedenic chancre by inoculation, but never with an affirmative result. The same attempt has been made by Fournier, with like unsuccessful results.

In the treatment of phagedenic ulceration of an indurated chancre, the measures to be employed do not differ from those proper for the same accident when engrafted on the soft chancre. Phagedena in the infecting chancre is not so extensive, however, or so difficult of cure, as when the soft chancre is implicated.

In regard to the indurated bubo I have already called your attention to the intimate relation which exists between it and the infecting chancre. It is, however, contended by some syphilographers that it may originate without necessarily being preceded by any other evidence of disease. That is, that the chancrous virus may be absorbed so as to reach the lymphatic glands without ulceration or suppuration being caused in the first instance. Although I have never seen any such example, I am not altogether prepared to deny its possibility, and I really see no reason, physiologically, why it should not take place. It must necessarily be rare, for we know with what difficulty even under favorable circumstances the absorption of substances takes place from surfaces not deprived of their epidermis or epithelium, and during coition sufficient time for such absorption is not afforded. That bubos of an indurated character may be formed without a chancre preceding, is simply shown by the fact that they so frequently ensue on a gonorrhœa. An example of this was in the house a short time since, and you had sufficient evidence to show that such was the case. In the instance referred to there was no doubt of the non-existence of a chancre, and yet we had an indurated bubo in the left groin, impetiginous eruption, and alopecia.

The bubo d'emblé, while not impossible, is therefore improbable, but we can readily imagine cases where it might occur, cases in which the infecting virus has remained a long time in contact with a surface possessed of little local tendency to inflammation. This immunity is seen at times in instances of animals poisoned by the bite of the rattlesnake, where death ensues without any local disturbance, whereas generally the local irritation is very great.

Having thus brought under your notice some of the chief phenomena of the indurated chancre, we come in the next place to treat of its cure. I prefer to do this now before passing to the consideration of constitutional syphilis, which from its amplitude would separate us too much from the local affection.

Two indications are to be, if possible, fulfilled. 1st. To prevent infection; and, 2d, to cure the local trouble. The first of these is infinitely of greater importance. The second, comparatively a small matter, for as I have already told you, the infecting chancre is not, like the other varieties of venereal ulcer, characterised by much local irritation or tendency to the supervention of troublesome complications.

According to Ricord, if an infecting chancre is destroyed by escharotics within the first five days after contagion, infection is never produced; if this procedure is not practised until after induration appears it is useless, infection will certainly follow. In other words, he regards the induration of a chancre as giving positive evidence that infection has already taken place, and accordingly he never cauterises a chancre when this specific sign is present. If, however, induration has not appeared he destroys the specific character of the chancre, and converts it into a healthy non-infecting ulcer. Consequently his plan is to cauterize all soft chancres, and not to cauterize any indurated chancres. Now, as it is impossible to distinguish in its first stages, before induration is manifested, a simple from an infecting chancre, it is difficult to arrive at an exact estimate of the value of M. Ricord's method, for doubtless the great majority of the chancres thus destroyed would never have been followed by infection even if let alone. Nevertheless, so far as his practice relates to the early destruction of all chancres, there can be no doubt of its propriety, but that principle of his system which is opposed to the destruction of a chancre after induration has appeared, is, I am perfectly satisfied, calculated to lead in many instances to unfortunate results to the patient. In fact the primary basis of M. Ricord's doctrine is, I think, wrong. Instead of regarding the induration of a chancre as the sign of infection already accomplished, it should be considered as the first manifestation of the infecting character of the ulcer. It is not due to the reaction of the absorbed virus upon the base of the chancre, as Ricord appears to believe, but it is the sign by which we know what we have to deal with—a part of the chancre itself, and the part which serves to distinguish it from anything else which affects mankind. The fact is, that M. Ricord, notwithstanding his tardy declaration of a belief in the duality of the virus, has not yet been able to divest himself of his earlier formed doctrines. Certainly if he believes that induration is the evidence that the system is infected he can scarcely believe in the duality of the poison, for in that case the induration is not an attribute of any one kind of chancre, but only an evidence that the virus of the ulcer to which it is superadded has been absorbed into the system. M. Ricord vacillates in regard to this point.

Now, as I have told you, I believe that induration is peculiar to one kind of chancre, that this species always has it, and I am further convinced that its appearance is no evidence that infection has taken place. Therefore, in the first stages of an indurated chancre I should certainly destroy it with the carbo-sulphuric acid paste, and I am convinced from ample experience that in many cases infection would be thereby prevented. The indurated bubo would not be prevented, for I believe that the specific action which causes the induration of a chancre is simultaneously set up in the lymphatic glands, but then I do not claim that one indurated bubo is necessarily followed by constitutional syphilis if proper remedial measures be adopted.

According to my experience the caustic plan of treatment of the indurated chancre may be practised with a reasonable prospect of success, if employed within the first six days after the appearance of the pustule, whether induration be present or not. If used subsequently to this period on a chancre of the infecting kind it will generally prove unsuccessful of itself in preventing infection, even if induration had not yet made its appearance.

Some surgeons cauterize the indurated chancre at any time of its progress, on the grounds that the rise of other chancres is thereby prevented, and that contagion is no longer possible. The first of these, we have seen, is not to be considered, for we know that the liability to the propagation of fresh chancres on the affected individual does not exist. The second is only valid during the progress of the chancre. When its further advance is arrested, it is, as has been definitely ascertained, no longer contagious—previous to this stage ordinary precautions can readily be taken in the cases of most individuals. When, however, the patient is of such a character as to be devoid of scruples on the subject of communicating his disease to others, it is proper to cauterize his chancre on strictly moral principles, so as to prevent, as far as possible, the further spread of this loathsome affection.

After cauterization the most simple applications are all that are necessary. Ricord and other French surgeons use the aromatic wine, a vinous tincture of some thirty aromatic herbs. This acts very well; there is nothing, however, specific in its properties, and I have always found a solution of tannin to be equally efficacious. The strength of this should not exceed two grains to the ounce of water. Should the chancre be healing, or even if it has ceased to progress, as I have told you, cauterization is unnecessary, nay more, exceedingly improper. In such cases commence the local treatment with the solution of tannin above mentioned. You will obtain from this all that it is possible to get from local medication, which with the exception of the cauterization in cases that require it, accomplishes more on account of its detergent action than by any direct effort upon the chancre.

In regard to the local application of mercurial remedies such as the black wash, the yellow wash, mercurial ointment, red precipitate ointment, calomel, &c., I have nothing to say in laudation—chancres get well under their use, or rather in spite of them—as they generally do under any treatment which has ever been recommended. Indurated chancre especially is a self-limited ulcer, even if let alone from the commencement. Unless it is destroyed by escharotics, or attacked by phagedena, or other complication, it runs a regular course, and is healed spontaneously in four or five weeks.

In regard to the efficacy of internal remedies in accelerating the cure of the chancre, I have very strong doubts. Do not misunderstand me. As we shall see hereafter, constitutional treatment, with the view of preventing infection or destroying the morbific matter circulating in the blood, and contaminating the tissues, is eminently proper and necessary, but that such treatment exercises any effect over the chancre I hardly believe. We know that indurated chancres are healed just as soon without mercury as with it. Under the influence of this agent, however, the induration of a chancre certainly does disappear sooner than if no mercury is given, but the ulcer is just as long in healing.

But with the view of preventing infection much may be done, and to the consideration of this and other subjects of importance, I propose to devote the subsequent lectures. This concludes what I have to say on chancre.

Original Communications.

SOME ANATOMICO-PATHOLOGICAL STUDIES OF HYDROMENINGOCELE.

CONSIDERED AS A DISTINCT VARIETY OF CRANIAL HERNIA.

By CHARLES HASSE, M.D.,

OF NEW YORK.

Besides true congenital hernia of the brain (Hydrencephalocele), another kind of swelling has occasionally been observed, which, in many phases, simulates, and no doubt has often been mistaken for the former from the want of knowledge to discriminate their pathological difference. It essentially consists in this, that the bag of the latter does not, like the former, contain true brain substance, but is merely a protrusion of dura mater with its arachnoideal lining through some insufficiently developed and yielding point in the skull, by an accumulation of fluid beneath.

This anomalous appearance, like all other vague points in pathology, until brought to a proper understanding, has received diverse names by different authors, viz. Hydrocephalus spuriosus; Hydrocele of the head; Hernia aquosa; Saccus arachnoideus; Hydrocephalus meningo-cysticus, etc. **Rokitansky**, in his Pathological Anatomy, calls it, at page 281 (vol. iii.), a saccular protrusion of the arachnoid through the skull, which, though similar, must not be confounded with true hernia of the brain. Again, on page 258, speaking of the anomalous contents of the arachnoid, he says—When the accumulation (of serum) is considerable, it constitutes the disease which is known as external, or meningeal, hydrocephalus. It appears in two forms.

(a.) In that of dropsical sacs, which consist either of the arachnoid membrane alone, or, as is more common, of dura mater also, identified with the arachnoid, and attenuated in an extreme degree. They protrude through an aperture in the skull, and form a diverticulum of the arachnoid sac, which communicates with the general cavity by a narrow canal. (b.) The second (this condition does not exactly bear upon the subject in question, although being originally the same disease) is a uniform accumulation of serum in the arachnoideal sac, by which the brain is displaced and compressed towards the base of the skull, and the cranium is at the same time uniformly enlarged.

I have thus at length drawn on the storehouse of pathology (as it is frequently called) to serve me as a guide to more recent researches in this matter.

Mr. Spring, of Belgium, to whom the profession is much indebted for a better knowledge, and more special information on this interesting and important subject, has applied to it the name of meningocele, and has based its history upon a number of cases taken from various authors (Monographie de la hernia du cerveau—discussions at the Academy of Medicine at Brussels, 1845. Vol. iii. p. 7). On the slight evidence, however, of several of these cases, Mr. Honel considers the mere occurrence of meningocele (in contra-distinction of encephalocele, because no brain substance may have entered in the former) as very doubtful. —(Archiv. génér. de Medicine. Paris, 1859. xiv. 413.)

But Mr. Gintrac (Director of the Medical School of Bordeaux) has recently carefully collected and recorded some eleven cases more, to which he adds a twelfth of his own, which seem fit to elucidate this important point of cerebral pathology. He gives preference to the expression of hydromeningocele, because this name points at once to the real state of affairs.

As some of these cases are of considerable interest; and as it is not only in a scientific point of view, but likewise in a practical relation, of the greatest importance to investigate the diagnosis, consequences, and treatment of this fault of development, I have translated, and, as far as it was practicable, condensed them from Behrent's Journal for diseases of children. The original report may be found in the *Journal de Medicine de Bordeaux*, June, 1860.

I. A child, aged two years, had from the time of birth a considerable swelling on the back of the head. Mind unimpaired. A ligature was placed round the tumor, which had a bad effect, and produced blindness. The ligature was immediately loosened. Some days later the tumor broke and the child died. The interior of the swelling was only lined by the dura mater. No true brain substance was found in it.—(Hiob a Mekeron, *Observ. Med. Chir. Amstelod.*, 1668, cap. vii.;—Ferrand, *Mem. de l'Acad. de Chirurg.*, t. v. p. 66.)

II. A little girl, who attained only the age of three days, had a bag on the crown of the head, covered with hair, from which was discharged some blood, and it communicated with the interior of the cranium through the posterior fontanelle, which was hardly large enough to admit the little finger; its border was cartilaginous. The bag itself consisted of the external skin, pericranium, and a prolongation of the dura mater. The greater and lesser brain, likewise the medulla oblongata, were in a normal condition.—(*Mylius, Disc. de quella monstruosa Lipsiæ nata.* Lipsiæ, 1717.)

III. A little boy, who died at the age of two years and a half, had from the time of birth a very great coniform swelling on the crown of the head. This was punctured. The swelling was formed by the covering of the skull, dura mater, and arachnoid. The autopsy showed that the brain had been pressed down by the fluid, and had nothing to do with the tumor itself. It revealed some traces of inflammation, and even an abscess in the middle lobe of the left side. The abnormal opening in the cranium occupied the sagittal suture, and extended from the frontal to the occipital bone. —(*Loftie. Med. Observ. and Inquirer.* t. v. No. 13, p. 121.

IV. A little child was born with a tumor on the back of its head, which was as large as the head itself, and hung downwards upon the shoulders; its base was narrow. Besides some bluish spots and excoriations, a few hairs were noted on its surface. Fluctuation was distinctly perceptible within the tumor. The opening through which it communicated with the interior of the cavity of the brain, existed in the occipital bone to the left of its protuberance, and was so small as to allow only a sound to enter. The sac, internally, was lined by dura mater. Against the opening of the bone rested something like a sponge, which obstructed it partially: this was the pia mater. The brain did not enter into the tumor; its middle and posterior lobes were softened.—(*Teghil, Mém. de l'Acad. de Turin*, 1790–91. t. v. p. 187—also *Medical Facts*, t. vii. p. 281.)

V. Palletta examined, 1779, a child two months old, who had a large swelling at the nape of the neck, which was divided from above downwards, by a kind of partition. The tumor was fluctuating, and almost transparent. In the occipital bone existed a great opening, which communicated with the foramen magnum. The posterior arch of the atlas was wanting. The dura mater was forced upwards by fluid. Whether the tumor contained any brain substance, Palletta does not mention. But there is no doubt that, if it had, such an accurate observer would not have overlooked it. Palletta himself compares this fault of development with spina bifida.—(*Exercitationes Pathologicæ*, Mediolani, 1820, in 4to. p. 127.)

VI. A child, seven months old, had (from the time of birth) a swelling in the face, which had gradually increased, and extended from the eyebrows to the nose, and from one cheek to the other. This tumor was soft, elastic, transparent, and traversed by blood-vessels superiorly; it had separated the bones of the nose, and concealed the eyes. The power of vision, however, was not impaired. When two months old, its mother had succeeded in reducing the tumor by gradual compression; but it returned again and grew larger. A puncture then being made gave exit to a large quantity of fluid, was followed by vomiting, sickness, excitement, and acceleration of pulse. At a subsequent period the tumor opened again spontaneously, and gave vent at first to a turbid, and subsequently to a pus-like fluid. At last the pulse became more frequent, and death ensued. The fontanelles and suture were nearly closed. On the anterior surface of the left hemisphere, and beneath to the dura mater, existed a collection of fluid enclosed by an exceedingly soft, transparent, but firm membrane. The pia mater, underneath this sac, was much injected. The lateral ventricle on the same side contained some serum, and reached to the lower end of the lobe, where a hollow passage was found which continued outwards, through the cells of the ethmoid. The above-mentioned bag of fluid was connected with this passage, so that the external tumor could receive its fluid both from this, and from the cavity of the arachnoid; but with the fluid of the ventricles of the brain it stood in no connexion.—(Christison by Monro, *Morbid Anatomy of the Brain*. Edinburgh, 1827, p. 150.)

VII. A little child was born with a soft, pulsating, and reducible swelling upon the posterior fontanelle. There was no discoloration of the skin. The head of the child was quite large. At the age of one year, it had an attack of convulsion. The anterior fontanelle then was punctured, which was followed three days later by another attack of convulsion, and death. The arachnoid contained a large quantity of gelatinous fluid. The membranes upon the right hemisphere were normal, but upon the left they formed a bag filled with fluid, which depressed this side of the brain, making it appear as if atrophied. The ventricles of the brain were considerably distended with serum, mixed with pus. The superior longitudinal sinus did not strictly pursue the median line, but deviated slightly towards the left side.—(Hamilton, *American Journal of Medical Science*, 1837.)

VIII. On the naturally formed head of a healthy female child appeared, when three months old, a small swelling to the left of the posterior fontanelle; which was of the size of a pigeon's egg, compressible, fluctuating, and transparent; at its base, the edges of the bone were felt to be uneven. The child cried a good deal, squinted, and vomited, and seemed to possess less sensibility on the right than on the left side. A small puncture gave exit to a bright, transparent, clear fluid. Death took place at the age of six months. When the tumor was examined it was found to consist of the skin, pericranium, and dura mater, with its arachnoideal lining. The surface of the latter looked cloudy, and was covered by inflammatory exudation. The opening, through which the membrane protruded, was situated between the posterior border of the left parietal, and upper border of the occipital bone. The fluid in the bag was cloudy, reddish, and contained puslike formation. The right lobe of the brain was normal, the left however was smaller, tenser, and not a trace of convolution could be seen. The ventricles contained some little serum. (Breschet, *Archives génér. de Med.* t. 26, p. 72.)

IX. In the month of March, 1840, Mr. P. Dubois exhibited to the Academy of Medicine of Paris a child (age and sex not mentioned) who was born and died at the Maternité with a tumor on the back of its head, which was nearly two thirds of the size of the head itself. It hung down upon the nape of the neck, appeared to contain a fluid, and to be connected with the interior of the skull. An incision gave exit to a bloody fluid. Internally, the tumor was lined by a smooth fibrous membrane, and contained no brain substance whatever. The opening, which led to the interior of the cranium, existed in the occipital bone, and was large enough to admit a finger.—(*Gaz. des Hôpitaux*, 1840, p. 170.)

X. Three days later (to the exhibition of the previous case) Mr. Depaul showed to the Anatomical Society of Paris the head of a child who had died during labor. On the posterior of the same, existed a bag, which contained fluid, and was connected with the interior of the cranium by an opening, which occupied the protuberance of the occiput. The swelling was as large as the head itself, and contained a clear, yellowish, transparent fluid, but no brain substance. The lesser brain was wanting; the rest of the brain was normal.—(*Bullet. de la Soc. Anatom. de Paris*, 1840, p. 105.)

XI. The fifth child of a well-formed woman was born with a great swelling on the back of the head. Otherwise the child was well. A puncture, made with a needle, discharged 600 grammes (a little over a quart) of fluid. A month subsequently, the puncture was repeated. Death took place twenty-six days after the second puncture. The bag, lined by a membrane profusely supplied with blood-vessels, contained 150 grammes of a greenish fluid. A cleft existed, and extended from the occipital protuberance to the foramen magnum. The posterior arches of the atlas and second vertebræ were wanting, also the third and fourth cervical vertebræ were split. A fibrous membrane obtruded the upper part of the cleft, and left only a small opening below through which the tumor communicated with the interior of the cavity of the cranium. The brain itself was soft, and the ventricles seemed somewhat dilated.—(Pooley, *London Medical Gaz.* 1847.)

XII. A female child was brought to the Foundling Hospital at Bordeaux shortly after birth, in September, 1850, with a uniform swelling on the occiput. The child nursed well. When a few months old she began to squint; she was never able to stand or to walk; appeared, however, not deficient in intellect, and learned even to speak a few words. Convulsions were not observed. She was nursed until she was seventeen months old. The tumor was soft, elastic, distinctly fluctuating, and diminishable by pressure; its greatest transverse diameter measured from seven to ten centimeters (2¾ to 3¾ inches), and its length was eleven centimeters (3¾ inches). It was difficult to find an opening in the occipital bone where the swelling existed. No treatment was resorted to, except good nursing. Death took place in March, 1852, during an attack of suffocation. On a careful examination the head was found to be well shaped, the skull bones were thick, the sutures closed; only the anterior fontanelle remained wide open. The brain completely filled the cavity of the skull; its lateral ventricles contained a large quantity of clear fluid. There were some few other deviations from the natural formation of the greater or lesser brain (which are not specified). A round hole, about one centimeter (four lines) in diameter was found below the protuberance of the occipital bone through which the external swelling communicated with the fossæ cerebelli. In the swelling no brain substance was found; it was lined by a smooth membrane continuous with the arachnoid. The dura mater rested against the pericranium.

The contents of the tumor consisted of serum which came from the ventricles of the brain.

There are some points in which the report (from which I translate) of this case is not very precise. It would be interesting to know whether pressure upon the tumor produced any symptoms of compression of the brain. Whether the communication between the external swelling and the ventricles of the brain was at the valve of the arachnoid: most likely, as any other would of necessity imply rupture of the brain itself; and such an important lesion would certainly not have remained unnoticed. Again, what was the cause of suffocation from which death took place: was it produced by any lesion in, or pressure upon, the medulla oblongata, or was it merely some accidental or mechanical cause? I am sorry that the original record is not at my disposal to answer these questions, and must therefore refer for their solution to the above-named *Journal de Médecine de Bordeaux*, June, 1860.

Mr. Gintrac, after having thus far shown the pathological difference between encephalocele and hydromeningocele, has come to, and gives, the following conclusions respecting the latter.

Hydromeningocele may differ, according as the fluid which raises the meninges, is arachnoideal or ventricular.

In both cases the brain may be in a more or less retarded state of development, or spoiled condition.

The most frequent seat of these swellings is at the back of the head; but they occur also at the inferior region of the forehead (root of the nose). The serum does less frequently find its way through the fontanelles or sutures, than through an abnormal opening in the bones themselves in consequence of retarded development.

The tumor does occasionally occur in the median line of the head; more frequently, however, to one side of it.

It is most probable that the disease commences in utero, and at the beginning of gestation.

It is difficult to determine the cause of the deficiency in the skull. This formative fault does not always restrict itself to its primarily occupied place, but extends frequently, so as to form a cleft.

Simple hydromeningocele is that, which is not complicated with extensive changes or with retarded development of the brain, and has in its effects neither any very marked functional disturbances of the same, nor any conspicuous modifications in the form or size of the head.

At birth, the tumor is generally not very large; occasionally, however, it is already of considerable size, and then it becomes frequently an obstacle to parturition.

The form of the swelling is variable: viz. hemispherical, oval, conical, etc.

The tumor is very seldom covered with hairs, or if at all, they are scattered.

The skin covering the tumor is delicate, and generally semi-transparent. It does not usually change its color; but in some cases becomes of a brownish-red.

Fluctuation is almost always distinctly perceptible in the tumor.

At the beginning, the swelling can easily be reduced, imparting distinctly the feeling that its contained fluid enters the cranial cavity.

The opening in the skull may be felt, after thus emptying the tumor; frequently it may even be detected without doing so. Only in those cases where the opening is very small, and the fluid in the bag difficult to reduce, may it escape observation.

The tumor generally is not pulsating. It becomes tense, when the child cries, or when it makes any strong exertion.

It is painless, and may be compressed without distress to the child; but if it is large, heavy pressure upon it may produce serious brain symptoms, viz. drowsiness, convulsion, vomiting, etc.

It is not very easy to distinguish hydromeningocele from hydrencephalocele during life; the differences are indeed occasionally very trifling. In those cases, however, where the tumor is very transparent, and where its fluid is yielding, and can be easily and completely reduced within the cranial cavity, it may almost with certainty be concluded that the case in question is hydromeningocele.

The prognosis is not good, but not so bad as in hydrencephalocele.

It is conceivable, that the opening in the skull may gradually grow smaller by progressive ossification, and that the membranous walls of the tumor may adhere to each other in such a way, that a firm barrier is produced against the egress of the fluid from the cranial cavity.

The tumor should only be punctured if the opening in the skull is very small. The advantage of the puncture consists in its rapid reduction of the swelling if it is large. Every precaution against the entrance of air within the cavity of the brain must be taken.

If the opening in the skull is large, the prognosis is as bad as in hydrencephalocele.

PUERPERAL PERITONITIS.

TREATED SUCCESSFULLY WITH LARGE DOSES OF OPIUM.

By G. P. CADY, M.D.,

OF NICHOLS, TIOGA COUNTY,

(Read before the Medical Association of Southern Central New York.)

Mrs. C——, a healthy, though not robust, woman, aged 35, was delivered of her fifth child, April 2d, at nine o'clock A.M. I saw her first at midnight and found the labor progressing favorably, but about four o'clock the head became impacted in the pelvis, and although the pains were very strong for three hours, there was no progress whatever.

The pains then became irregular and distressing, and the patient exhausted and nervous. I then gave chloroform and delivered with the forceps, without trouble. I left her comfortable. In the afternoon of the second day, she took a laxative, which moved the bowels in the evening. The next morning I was called to see her, and was alarmed to find her attacked with puerperal peritonitis. She had slept but little through the night, and during the latter part had suffered several severe chills. Her skin was dry and hot, her tongue dry and covered with a thin white fur, her countenance anxious, her respiration hurried, her pulse 140, her bowels, especially the lower part, extremely tender and painful, so that the binder had to be loosened, and there was also tympanitis and slight sickness of the stomach. I went to my office (for she lived but a few steps from us), and weighed out two doses of opium, four grains each, one of which I gave at nine and the other at eleven o'clock. I then gave two grains every hour for four hours, when she became thoroughly narcotized. She lay quiet, her skin moist and itching, her eyes slightly suffused, the pupils contracted to a point, the respirations 10 per minute, and sighing. She complained of no pain, but was easily roused to take her medicine or drink. I gave all the medicine myself, and for four days I firmly maintained this condition of complete narcotism, by large and repeated doses of opium, as were required. Sometimes I would give her two grains every hour, and sometimes two grains every two hours, taking particular care not to give too little as well as not too much.

On the third day she vomited several times, but I only repeated the medicine oftener, and it soon subsided.

I did not permit the respiration to vary much from 10 per minute. On the fifth day, the pulse began to fall, and I held up on the opium. On the sixth day, the pulse was 85, and from that time she took four grains each quinia and opium, per day, for several days, when her appetite returned, and both were omitted.

On the sixth day, I ordered an injection of warm water, which moved the bowels freely. The lochia were much less during her severe illness than for several days after.

I did not give nearly so much opium in this case as in some others that I have treated, for the reason that it did not require so much to induce narcotism. I gave thirty-four grains the first twenty-four hours, and after that from twenty to twenty-five grains per day.

LONG CONTINUED HÆMORRHAGE IN UTERO-GESTATION.

ANÆMIA—ARTIFICIAL DELIVERY—RECOVERY.

By A. SEARLE, M.D.

OF ONONDAGA VALLEY, N. Y.

In the year 1841, I had the care of a lady somewhat advanced in life, of laborious habits and strong constitution, who had been pregnant four or five months with her fifth and last child. When I first saw her she was suffering from a moderate uterine hæmorrhage, but otherwise was in good health. I directed astringents, cordials, and rest. I did not hear from her again until the full time of gestation had expired. Then, by the advice of a lady friend, who stated that "something must be done," I was sent for again. I found that a constant hæmorrhage from the uterus had been kept up from the time of its commencement. To me the symptoms were of the most alarming character; her face and lips were pale as death, and the pulse was very small and feeble. To all appearance her strength was almost exhausted; the same moderate hæmorrhage was still continued; her face was puffy as a person with the dropsy; and dyspnœa, a still more alarming symptom, was present. There had not as yet been a symptom of labor.

As counsel could not be readily obtained, and agreeing with the old lady friend, that not only "something must be done," but that the patient required immediate assistance, I determined to attempt her delivery without delay. This course was suggested to me by a similar case related to me by a neighboring physician. He stated that his case proved fatal by waiting for natural labor; and he remarked, that if he should have another similar case, of long continued and moderate hæmorrhage, he should deliver the patient before her strength was exhausted, whether the patient was in labor or not. I proceeded therefore immediately to examine the case, with reference to immediate delivery. The os uteri was dilated, and the whole system very much relaxed, and favorable for the operation. I succeeded without difficulty in grasping both feet of the child, and bringing them down together, as is my usual practice in version. After the lower extremities were brought into the vagina, natural pains were excited, and the patient, with slight assistance, was soon delivered of a still-born child, having no appearance of life. Convalescence was rapid and complete.

CASE OF PLACENTA PRÆVIA.

By FRANKLIN A. YOUNG, M.D.

OF GLENVILLE, NEW YORK.

On the 1st day of June, 1861, at 9 A.M., I was called in great haste to see Mrs. T——, aged 20. The messenger informed me that she was in the seventh month of pregnancy with her second child. Was also informed by him that she had had considerable hemorrhage the day previous, which was now much increased and accompanied with labor pains. I visited her as soon as possible (the distance being four miles from my office), and found the bedding and clothes of the patient completely saturated with blood. Her pains were short and feeble; pulse weak. Was informed by the nurse that the hemorrhage had suddenly stopped a few moments previous. On examination found the mouth of the womb dilated about the size of a quarter of a dollar, with the placenta presenting. There was occasional nausea and vomiting. No hemorrhage now occurring, I of course could do nothing but wait. The labor pains continued to increase and the os uteri to dilate. The membranes ruptured about 12 M., and at 12.30 the placenta presented at the vulva, and was shortly followed by the child, which was expelled dead. No more hemorrhage occurred. The patient was very much exhausted from loss of blood, but stimulants were freely administered, and she soon rallied. She had a good recovery. This case confirms Simpson's theory, I think, that the complete separation of the placenta arrested the hemorrhage. Soon after the sudden stoppage of the blood the membranes ruptured, then in a short time the placenta presented. Does it not fully confirm Simpson?

Reports of Hospitals.

BELLEVUE HOSPITAL.

ANEURISM OF THE AXILLARY ARTERY.

SERVICE OF DR. J. J. CRANE.

[Reported by ERSKINE MASON, M.D., House Surgeon.]

John Meyers, æt. 45, Ireland, carpenter, admitted July 15, 1861. General health good, no hereditary predisposition. Five years ago suffered from a slight attack of rheumatism, which is the only sickness he remembers having. Last December he noticed a sharp constant pain in the top of the right shoulder, which lasted nearly up to the present time; at present he suffers but little. Three months ago he noticed a swelling in the right axillary space, which has gone on increasing up to the present time. Two months ago his right arm became œdematous, and is now very much enlarged.

Inspection revealed a large tumor filling the whole axillary region, as well as the subclavicular and superior pectoral regions, and extending backwards so as to press the scapula outwards, and to one side. The veins over this tumor are very much enlarged. The horizontal measurement of the tumor at its widest part is over twelve inches, anteriorly its depth is about six inches, laterally in the axilla it is about four inches, and posteriorly over the scapula about four and a half inches.

Physical examination reveals a very slight pulsation synchronous with the heart. Auscultation gives a single bruit, no aneurismal thrill. An anemic bruit is heard over the aortic valves. A consultation being called, it was decided not to operate. The tumor seemed to be increasing rapidly upward, and the strength of the patient grew weaker and weaker, till he finally sank, and died July 18, at four and a half P.M.

Autopsy.—The aneurism was found to have taken its origin from the axillary just where it becomes the brachial, and extended upwards under the clavicle, beneath the carotid as high as the thyroid cartilage. The subclavian artery was strongly adherent to the sac of the aneurism. The inner surface of the clavicle was somewhat eroded, and the brachial plexus of nerves were so compressed, that they presented the appearances of bands stretched across the tumor. Inside the thorax it extended down below the fifth rib, having caused absorption of all the four upper ribs, and a portion of the fifth. The lung was also greatly compressed; outside the chest it extended downwards to the seventh intercostal space. Scapula was pushed outward, and to one side, and the superior angle was found to have been partially absorbed. Aneurism, when removed, measured from within outwards nine inches, above downwards eight inches, depth seven inches. Heart healthy. Notwithstanding all this pressure upon the nerves, and compression of the lung, he scarcely ever complained of any pain, nor was there any distress as regards his breathing while he was in the hospital.

TRAUMATIC ANEURISM OF THE COMMON CAROTID.

SERVICE OF DR. JAMES R. WOOD.

John J. Samuels, æt. 12, good constitution; was admitted into the hospital, July 6, 1861. Five weeks before admission, he was struck by a fragment of a small brass cannon which exploded, producing a wound of sufficient size to admit the first joint of the little finger, upon the left side of his neck along the base of the inferior maxilla, midway between the symphysis and angle of the jaw. The hemorrhage was so great as to cause immediate syncope; and half an hour elapsed before the bleeding was fully controlled. The same day a tumor was noticed by his mother on a line with the wound, between the sternum and left mastoid process. It gradually extended, though producing no pain which the child complained of.

On admission it was the size of a goose's egg, measuring in its long diameter over three inches; short diameter two inches; situated about equally anteriorly and posteriorly to the angle of the jaw, which it covered; diminishing obliquely above, more abrupt and protuberant below. Distinct pulsation and bruit existed throughout the whole extent of the tumor, which was tense though elastic. A few days before admission he consulted Dr. Wood at his office, who advised an operation, and sent him to the hospital for that purpose.

July 10.—The patient being etherized Dr. Wood tied the common carotid below the omo-hyoid in the omo-tracheal triangle. The artery was found at a depth of two inches, and an inch and a half to the left of its normal bed, so as to be near the outer border of the sterno-mastoid muscle. As soon as the ligature was tied all pulsation and bruit ceased. The following morning, the tumor not having become hard, though all pulsation had ceased, cold was applied with some little success. There was also considerable febrile movement, which abated under the exhibition of liquor ammon. acet. and morphia. *July* 14.—Tumor has increased one-third in size, although there is no pulsation, and is somewhat discolored anteriorly, and elastic; posteriorly it is rather hard. The enlargement, though chiefly upward and outward, still threatens to compress the trachea. 7 P.M. tumor has extended to the malar process, the larynx is pressed upon so as almost to prevent vocal sound; breathing stridulous; and some dyspnœa. Patient only able to sleep while lying upon his face. The sutures for the wound were removed, and a small quantity of serous discharge evacuated. *July* 15.—The original wound having ulcerated through, arterial hæmorrhage took place, which was controlled by plugging the wound with picked lint dipped in the solution of the persulphate of iron, and a graduated compress. After this hæmorrhage the breathing seemed to be for a time somewhat relieved. *July* 16, A.M.—The tumor has so increased that he can hardly swallow, and then only while in the erect posture; his breathing is also labored, though not to the same degree as the day previous. A quarter to 4 o'clock of same afternoon, profuse hæmorrhage again took place from the same wound, which could not be controlled by pressure. Accordingly, in pursuance of the directions left me by Dr. Wood, while Dr. Fernandez held the head in position, and controlled the carotid of opposite side, I instantly laid the aneurism freely open, turned out the clots, and without any great difficulty save from the presence of hæmorrhage which was excessive, succeeded in seizing the bleeding carotid, which was bleeding from both the distal, and a small arterial twig at the cardial extremity of cut vessel. The wound was about one inch above Dr. Wood's ligature, and about six lines in length. The hæmorrhage which took place during this operation, was truly frightful, and though the patient was kept constantly stimulated, so great had been the loss of blood, that he died about ten or fifteen minutes after the vessel had been tied. Upon post-mortem examination the surrounding tissues of the neck were found to be in a sloughy condition. A firm coagulum had formed above the ligature, though none below it.

Penetrating Wound of the Antrum of Highmore.

SERVICE OF DR. J. J. CRANE.

John Broderick was admitted into the hospital, July 1, suffering from some slight flesh wounds upon his arm, and an incised wound under the left eye about an inch in length. These wounds he stated he received with a knife in the hands of a soldier. Upon examination of the wound beneath the eye a small piece of loose bone was felt, which was removed. The wound was thoroughly explored both by the finger and probe, and nothing abnormal detected. The wound did perfectly well, and the patient was discharged July 12.

July 15, he was readmitted with left side of face and throat enormously swollen. The fauces were also so extensively swollen that all examination of the throat was entirely out of the question. The tongue was turned upon itself, and pushed over to the left side. At times he expectorated considerable blood, and suffered from dyspnœa. Upon consultation the tumor upon the outside of his throat as well as inside, was thoroughly explored, but nothing detected. July 16, the dyspnœa had become so urgent that I performed tracheotomy about 7 P.M. which greatly relieved him, and he slept quietly till about 10½ P.M. when he arose up in the bed to call the nurse, and suddenly sank back and died.

Upon post-mortem examination, a blade of a common table knife was found three inches long running through the antrum of the superior maxilla, which had passed through the floor of the orbit, through the antrum breaking off the alveolar process of last molar tooth, and having no connexion with the buccal cavity. It passed above and behind the hard palate, passing into the conical region between ramus and angle of lower jaw, at which joint there was a cavity filled with broken-down tissue and coagula. There was also some œdema of the glottis, and an opening was found leading from the above cavity into the upper portion of the trachea, which was filled with clots of blood.

American Medical Times.

SATURDAY, AUGUST 3, 1861.

THE PROFESSION AND THE CRISIS.

We are for the first time as a nation engaged in a war of great magnitude, and one which will necessarily inflict a vast amount of individual suffering and national loss in health, limb, and life. The vigor of national life depends on the vigorous life of the molecules; and whatever prematurely cuts off a life, injures health, or destroys a limb, injures the nation, and impairs its strength. The public sentiment of the country has not been alive to this fact, and it will take all the terrible lessons of war and its attendant calamities to impress this truth effectually upon the national mind and conscience.

We to whom life ought to have been at a premium have been less conservative of this precious commodity than Austria (whom we have often lightly undervalued and despised), where life is redundant. Life has been habitually disregarded, and wantonly wasted. The suicidal and murderous practices which exist in the community, of preventing and destroying offspring, have obtained such hold on large portions of the people as to rank among the conservative virtues. This perversion of both natural and supernatural virtue will probably undergo speedy correction. Boys will be wanted to defend their country, replenish decimated ranks, and cultivate the neglected soil. They will soon become valuable; and the virtuous American matron surrounded by a troop of fair daughters and stout sons, will not be reproached as a foolish person who has had a larger family than was convenient, but will be honored as were the Roman and Israelitish matrons for bringing forth and rearing children—the future life of the State.

The medical profession is the guardian and conservator of life. It has exposed and denounced the vice alluded to—the product of an age of effeminacy, luxury, and sensuality, and exerted all its power to check and extinguish it. It now is addressing itself to the task of saving an unnecessary waste of life in its strength and maturity, in the effort to preserve national existence.

All great discoveries for the arrest of pestilence, the cure of disease, the preservation of life under threatening circumstances, and the mitigation and extinguishment of pain, owe their origin to the medical profession. It has calmly examined every proposition to these ends, from whatever source emanating, accepted the good, and rejected the bad. It has jealously watched over the public health, and courageously exposed and denounced the causes of disease, and abbreviation of life arising from ignorance, avarice, or oppression. It has always ranged itself on the side of justice, humanity, and charity. It has boldly led the forlorn hope in pestilence and famine, and, non-combatant, has encountered all the risks and dangers of the battle-field, without the stimulus of honor, promotion, and public favor held out to the brave or successful combating officer. Egypt and the Peninsula, Mexico, the Schleswig Holstein and the Crimean wars, India and China have each produced its medical heroes, and have raised military surgery and medicine to their present high scientific and social standard. The fever hospitals of Dublin and London, the yellow fever epidemics of Spain, Gibraltar, Jamaica, New Orleans, Savannah, Norfolk, and Portsmouth, and the ship fever of 1847, bear witness to the courage, devotion, and success of the civil element of the profession, and together prove, if proof were wanting, that that profession is the conservator of life, that its principle is to save life, and its interest, to be successful; and that it is fearless, in seeking its ends, of personal dangers, prejudice, and authority, and moderate in its claims for honor and reward.

We are now making the first great draft upon our national life. One-half of our people are in open rebellion, and the other must make fearful sacrifices to recover that which is in danger of being lost. The losses on both sides are national injuries, and affect the life of the nation. The medical profession must rise to the emergency with singleness of purpose, purity of motive, and unanimity of action.

War, whatever it may be in its results, is destructive in its operation. Sick and wounded soldiers are its product and its encumbrance. The General ought to have nothing to do excepting with strong men. His interest and duty require strong men to work and fight. His humanity respects and sympathizes with suffering, but his necessities forbid him to exercise those amiable sentiments; and by and bye a disgust is felt for both sick and wounded, every body and everything connected with them. From this source, and the traditions of inchoate medieval medicine and surgery, have arisen the gross indifference and neglect of the medical staff of armies, and the preference over it of other more showy but not more necessary departments. It requires as much intellectual power and culture to preserve and restore human health as to make a cannon, build a fortification, or plan a battle. Hygiene is as great a science as engineering. It is for the same reason that Surgeons have been denied substantial military rank, and that the fighting officers have always manifested a jealousy of any step in advance made by the Surgeons. In short, it has been and is the principle to prefer life-destroying to life-saving.

The scale upon which recent military operations have been conducted, and the modern rapidity of movement and execution, have demonstrated to all well educated and enlightened military men the necessity of adopting measures by which sickness may be prevented, and the risks of sudden and extreme changes of climate and habits of life in some degree guarded against. The soldier in modern warfare is more of a machine than he ever was before, and less provided with the means of self care and individual existence. He partakes of the physical constitution of his race and country, and has most of the artificial wants and insidious seeds of premature decline which inhere in our system of hyper-civilization. The rapidity of transportation carries him suddenly from his accustomed climate to one wholly new and perhaps injurious, and for the same reason he is exposed to frequent and often very great irregularities in respect to his supplies.

The modern rapidity of movement is far more prejudicial to life than the slow operations of a former period, and are far more dangerous to the soldier than all the inventive genius expended in projectiles and Zouave drill. Besides, the modern soldier, especially the American, is intellectual; he reads and takes a deep personal interest in every public act and movement, and has, superadded to his other causes of waste and decline, high mental activity, from which the old-fashioned soldier was perfectly free. Modern science, which has created the cause, must provide for the result. It must, by prophylaxis, sanitary science, care in inspection, and surgical and medical skill in treatment, reduce the mortality of troops to very near the level of ordinary metropolitan districts, the casualties of battle excepted. This duty devolves upon the profession as the conservator of life, and as the only body which possesses the knowledge and humanity to execute it.

It must be furnished with the necessary power.

The agents of the profession in carrying out this object, are the Medical Staff of the Army, and the Sanitary Commission. The latter ought to have executive powers added to its functions of inquiry and advice, to enforce its requirements, and a distinct appropriation for its expenses. The rank of the medical officers should be increased. The Surgeon-General should have the rank of a Major-General, and Medical Directors should be Brigadiers. Surgeons of five years should be Lieut.-Colonels, and after ten years, Colonels; Assistant-Surgeons should be Captains, and after five years Majors. Substantial power should be given over sick and wounded men, and all persons in any way connected with them; and sanitary advice should be considered imperative, unless overruled by a paramount military reason. The Chief-Surgeon should be ex-officio honorary member of the Council of War, and should have *command*, not direction, of the whole medical and sanitary corps. The Quarter-Master, who has charge of the transportation of supplies, should report to him, and act under his orders, and he should have control, and be responsible for the removal of the wounded, from the field to general hospitals.

The objection to substantial rank and command made by line officers is, that by introducing it, the authority of the fighting officer would be interfered with, and discipline impaired. We believe the result would be directly opposite, as the two authorities, military and medical, are in two distinct orders, and would clash less than the present method of mutually uncertain sovereignties. The efficiency of an army depends on its healthy, robust men, who can do hard marching, eat coarse food, bear privations, and rebound with elasticity from ordinary illness and excessive fatigue. This is the weapon to be placed in the hand of the General. When a man cannot come up to this requirement he must be handed over to the surgeon to be cured, or discharged. The surgeon should have plenary authority, and the General commanding should not concern himself about the sick and wounded, excepting to furnish guards and escorts. The Surgeon should be held responsible for the preservation of health, and after a battle, for the removal and proper treatment of the wounded; and if they have not been brought off, and properly succored, he should bear the blame, unless he can show good reason why he could not execute that portion of his duty. Officers and men, who are in any way concerned with the sick wounded in hospitals, should be commanded by the surgeon in charge, precisely as the surgeon is in his turn commanded in purely military matters. There is no more incongruity in an old officer obeying a young surgeon in one department of military government, than in an old surgeon obeying a young officer in another.

Sanitary Commissions may inquire and advise; Surgeons may skilfully and heroically operate under fire, and suffer themselves to be captured with their wounded; Assistant-Surgeons may nightly walk their wards till they faint upon the floor, but, until the Medical Staff are endowed with substantial rank, plenary authority, and promotion for merit, the mortality of armies will continue, the sick will be deprived of necessaries, and the wounded will be often left to rot upon the field. No man but a surgeon can appreciate what the sick and wounded require, and he should have a power to *command* it (not merely ask for it) if it is to be had. No other man has a cultivated principle and an acute self-interest entirely enlisted in the cause of saving life. With all others it is a humane sentiment and a Christian doctrine; with him it is a clearly defined, ever-present vital principle of study, thought, and action.

The recent battle of Bull Run adds its testimony to the heroism and devotion of the Medical Staff, and the inadequateness of the means at their disposal. The profession, as the conservator of life, asks in the name of the Republic why the wounded were not brought off the field, and why the hospital was not guarded? It asks why the surgeons were not sustained and protected in the discharge of their duty, and why none but those able to walk made their way back to Arlington, and the hospitals?

It does not appear that stimulants or nutrition were prepared in any quantity before the battle at the church at Centreville, or that any orders for the general guidance of the regimental staff were issued.

We know the character of Surgeon King; and we know that if he had had plenary authority he would have provided against all these contingencies, and that a better result would have been shown. It may have been that all was done that could have been done, but the heart of the country bleeds at the thought of her sons wounded in defending her very life, stabbed and mangled on their bed of glory by an infuriated horde of traitors and rebels.

The names of the medical officers who suffered themselves to be captured rather than desert their wounded, will be enrolled among those of the martyrs of science and humanity. It would appear, however, that they have suffered the double martyrdom of capture, and of being deprived of the object for which they they made the sacrifice. The animus displayed by the enemy should serve hereafter as a warning to medical officers, as they will be of no use to their fellow captives, and their regiments will lose their services.

We hope in our future battles the wounded and their medical staff will be properly protected, so that such sacrifices need not again be made. The medical officers whose duty it is to go forward with their regiments should remain with them, carefully sending the wounded as fast as possible to the field hospital. In civilized warfare the hospital, the surgeons, and the wounded, are sacred. These laws have been suspended in the Sepoy rebelllion, and in the present by one party.

It was recommended at a meeting of the section on Surgery of the Academy of Medicine, that a committee should be appointed to treat with the profession at the South with reference to a reciprocity of medical and surgical services. The South cannot be recognised as a legitimate belligerent, but having made her appeal to arms she is bound to observe the laws of civilized warfare. From what has occurred at Bull Run, and from the accumulative evidences of ferocity and cruelty, both there and against inoffensive northern people, we doubt whether any such proposition would be entertained. Until some definite understanding is had on the subject, we would advise the surgeon, if he is in danger, to leave his wounded whom he can neither remove nor relieve. The case is different in a permanent hospital, where there are sick and convalescents from amputations and resections. These are usually in a city, or in a large town; and if the place is taken, we would recommend one at least of the medical officers to remain. If Washington is in danger of capture, one at least of the medical staff should remain with the necessary attendants, in each hospital. We hardly think even the South would offer such a defiance to the public opinion of the world, and such an outrage to humanity, as to violate the hospitals of a captured town. At any rate, the sacrifice on the part of the medical officer would be heroic, and if slaughtered his death would be glorious.

In advocating plenary authority for the medical staff, according to rank and duty, we, as a matter of course, must be understood to mean that such power should be intrusted only to men of the highest order of professional and personal character. Thorough examination, and th demonstration of the possession of talent, character, discretion, and firmness, should be the only channels to promotion and confidence. The military staff should cherish a filial sentiment towards the profession, and the profession on her part should favor and encourage them by her approval, honors, and rewards.

We earnestly ask the attention of Congress, the Administration, and the State legislatures to the subject. Plenary authority was strongly recommended by the sanitary commission of the British Government to the Crimea, in 1855 and 1856.

The Medical Profession has never betrayed or abused any trust confided to it. The lives of thousands of citizens, the strength of the State, and the efficiency of the armies of the Republic, demand new, enlightened, and liberal legislation.

THE WEEK.

In the battle of Bull Run the Medical Staff of the Army seems to have been severely exposed, and to have won deserved praise by its devotion to duty. The surgeons of the New York regiments especially suffered in their efforts to succor the wounded. In this connexion we have to record the death of Dr. Alfred Powell, Surgeon of the Second New York Regiment. A captain of that regiment writing to the *Evening Post* says: "We mourn the loss of our physician, Dr. Alfred Powell, a noble man, who refused to leave those under his care, and was brutally murdered while engaged placing our wounded in the ambulance." Dr. Powell was a highly respectable practitioner of this city, and relinquished a lucrative business to join his regiment. His death, under the circumstances above given, attests his devotion to duty in the face of danger, and affords another illustrious example of medical heroism. Among the prisoners we notice the following surgeons from this city: Foster Swift, M.D., Stephen Griswold, M.D., Eugene Peugnet, M.D., S. Ferguson, M.D., Charles De Graw, M.D.; and from Brooklyn, J. M. Homeston, M.D., and F. Swalm, M.D.; from Maine, B. Buckstone, M.D., A. Allen, M.D., A. A. G. Williams, M.D.

It is stated that the prisoners are engaged in attending the sick in the hospitals.

The mortality among Medical Journals during the last half year has so greatly exceeded the births, that if the same ratio continues another six months, the profession will be entirely deprived of this useful class of publications. One after another has fallen from our exchange list, without its place being supplied, until the total is reduced to an insignificant number. At length we are cheered with the appearance of a new medical periodical—The Buffalo Medical and Surgical Reporter—dating its existence from August, 1861—a memorable era not only in the history of the country but in the history of medical journalism. We cannot sufficiently admire the courage of its editor, Julius F. Miner, M.D., who has boldly launched his bark upon a still tempestuous sea, whose surface is covered with the wrecks of many a stalwart ship. We can but regard this work as a proof of a sound and healthy state of our profession in Western New York, and most heartily do we wish it success. The *Reporter* will be issued monthly, in size thirty-two pages, and closely resembling the old Buffalo *Medical Journal*. The subscription price is $1,00 per annum. The present number contains papers of much local and general interest.

The Sanitary Commission, at Washington, which in this hour of trial is demonstrating its power of doing incalculable service to the suffering, has demands upon the sympathy and co-operation of the medical profession of the country, as well as of all humane and patriotic citizens. Medical men in whatever locality can contribute largely to aid the good cause by soliciting from their friends the supplies of which the wounded are in so much need at this time, and forwarding them to the Commission. They require ice, wine, sheets and sheeting, flannel, and toweling, and mosquito-netting. Many of these articles every country practitioner has the power to supply, and we hold that the neglect of such opportunities of rendering a service to the sick and wounded who have volunteered to fight the battles of our country, is reprehensible. We shall recur to this subject in a future number.

The return of the three months' volunteers has again filled our streets with soldiers; but instead of the plump and animated faces of the recent volunteers, they wear the thin, brown, expressionless visage of those who have not only been exposed to hard labor, but to want and privation. It may be that they have received every care that a wise and provident Government ought to provide, but it is certain that this aggregate reduction of the vital energies of an army must tell powerfully against it in the long and obstinate struggle for supremacy in the field.

Reviews.

Braithwaite's Retrospect of Practical Medicine and Surgery. Part Forty-third, Uniform American Edition. New York: W. A. Townsend.

This excellent resumé of current medical literaure for the last half year is punctually issued. It contains its usual variety of practical matter.

The Soldier's Friend: or, Hints for the Physical and Moral Welfare of Soldiers of the United States. By George J. Ziegler, M.D., of Philadelphia. Philadelphia: 1861. pp. 8.

Report of Committee on Military Surgery to the Surgical Section of the New York Academy of Medicine. New York: S. S. and W. Wood. 1861. pp. 31.

These pamphlets are designed for circulation in the army. Dr. Ziegler's work consists of several aphorisms relating to the preservation of health, and so stated that the common soldier can understand and practise them.

The Report of the Academy, a portion of which has already appeared in this Journal, is intended for the Army Surgeon. It is the design of that body to furnish copies of it gratuitously to the surgeons of the volunteer corps.

Our Alma Mater Fifty Years Ago: An Oration delivered before the Alumni Association of the College of Physicians and Surgeons, Medical Department of Columbia College, New York, at the Spring Commencement, March 14, 1861. By Thomas W. Blatchford, A.M., M.D.: New York, May, 1861. pp. 44.

The Alumni Association of the College of Physicians and Surgeons, was formed about two years ago, for the purpose of uniting, annually, the graduates of that school in social festivities; and thus cultivating and preserving the friendships formed during attendance upon lectures. On this occasion, an Oration is delivered by appointment, which has thus far formed a part of the Commencement Exercises of the College.

This is the Second Annual Address, delivered before the Association. The Orator, long one of the most eminent physicians of this State, was a graduate in the first class of the College of Physicians and Surgeons, in 1810. He naturally chose for his subject, a sketch of the members of the faculty at that early day. They were Bard, DeWitt, Hosack, McNevin, Mitchell, Post, Hammersley, Smith, Osborne, and Stringham. Dr. Blatchford has given a most interesting account of these founders of the School as they appeared to him in the lecture-room, interspersed with numerous anecdotes, illustrative of their individual characters.

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

By E. H. JANES, M.D.

Two Cases of Tetanus.

An interesting case is reported in the *Madras Medical Journal* in full by the late St. George Williams, M.D., in which chloroform and extract of belladonna were used with advantage.

The patient, aged 24, received a gun-shot wound in the left arm, followed in about three weeks with severe tetanic paroxysms. The treatment was at first, tr. hyosciam. opium and mist. camph., with liniment of ammonia and laudanum along the spine, and an occasional purgative draught. Tinct. of Indian hemp was soon substituted for hyoscyamus, leeches to the wound, calomel and morphia occasionally. On the fourth day of the paroxysms, he had during the last eleven hours, 20 minims tinct. of Indian hemp, and 20 minims tinct. of hyoscyamus, in a little brandy, every hour, without the slightest effects. "Skin since daylight appears of a darkish tint; lips bluish; respiration frequently entirely checked during the paroxysm; and the heart's action becomes scarcely perceptible; spasms scarcely ever absent." ℞ Chloroform ʒ ij., ext. belladonnæ gr. vi. M. minims xxx. for a dose in a small spoonful of water, and twice repeated within two hours, by which time the paroxysms became of shorter duration and less frequent, when the last mixture was omitted, and the cure was completed under the ordinary treatment. The writer does not think the patient could have survived an hour on the morning he resolved to try the chloroform internally. Large quantities of narcotics were given without the slightest effect. ℥ x of Laudanum were used in the liniment.

Another case is reported by George Smith, M.D., Residency Surgeon, Hyderabad, in which Fleming's tincture of aconite was the remedy employed, and is interesting both for the success of the treatment, and as illustrating the tolerance of powerful remedies in proportion to the severity of disease. The patient, a boy, aged 10½ years, of spare habit, slightly injured the tip and nail of the middle finger of the right hand, in the hinge of a door, and ten days after was brought under treatment, having had symptoms of threatening trismus for the last two days. A castor oil and turpentine enema was administered, and the following liniment ordered. ℞ Linim. opii ℥ i., extr. belladon. ʒ ss., tinct. aconiti ♏ xx., ol. olivæ ℥ ii. M. Two drops of Fleming's tinct. of aconite (prepared by Duncan and Flockhart) were given every hour. We cannot follow through the interesting details of this case; the patient's condition and treatment being reported at length at several different periods of each day. The aconite was continued throughout in doses varying according to the severity of the disease. The largest quantity was given on the eighth day, being 95½ minims (143 drops). The total quantity given during the seventeen days of treatment, was one ounce and 12 minims. An occasional purgation and other ordinary auxiliary measures were not neglected. The writer remarks that at the time this boy's case came under treatment, tetanus was very prevalent, and the trifling character of the local injury shows how strong the proclivity must have been. After the eighth day the disease began to give way, and in the same ratio was the tolerance of the remedy perceptibly decreased, and doses that on the 8th barely sufficed to keep the disease in check, would have proved fatal on the 14th. Its specific effects, as detailed by writers, were all observed in this case. He observed nothing to warrant the idea that the primary action of aconite is stimulant; but the sedative action was apparent from the very first cessation of the tetanic spasm being more or less distinct soon after taking the dose, though this action did not last so long as the specific effects on the general system. Hence the necessity of watching closely the case, and not leaving the administration of the medicine to incompetent hands. The patient was seen and the medicine given at least every second or third hour. Comparing the tetanic with the aconital action plainly shows the antipathic action of the remedy. In traumatic tetanus we have the local injury, from which irritation is conveyed to the nervous centres, inducing a state of hyperæsthesia or exalted polarity of those centres (the brain excluded), derangement of nervous function, increase of irritability and stimulus resulting in tonic spasm of the voluntary muscles, fixation of the diaphragm, pain from the contracted and torn muscular fibre, the consequent crushing of the sensitive nerves, and obstruction of the capillary circulation of the affected parts; followed by the consequent exhaustion; death occurring by asphyxia from spasm, or by asthenia from exhaustion, or by syncope, from sudden cessation of the heart's action. Aconite, on the other hand, alters the character of the local irritation, then abolishes it, the tingling being followed by numbness; it acts as a sedative of the nervous centres (cerebrum excluded), diminishing their polarity, and inducing a state of anæsthesia, impairing the excito-motor, vaso-motor, and voluntary systems of nerves, causing muscular weakness, paralysis of the diaphragm, suspension of spasm, paralysis of the capillaries, and general exhaustion, eventuating in death by asphyxia from paralysis or by syncope from shock. As no two states of the system can resemble each other more closely than those dependent upon tetanus and strychnine, and no two states of the nervous system are more thoroughly antagonistic than those induced by tetanus and aconite, the specific action of strychnine, and that of aconite, appear to be antagonistic to each other, a fact which should be borne in mind in cases of poisoning by either. In illustration of the great tolerance of medicinal action developed by certain diseases, the writer mentions giving half a drachm of Fleming's tincture in a case of hydrophobia without influencing in the least the paroxysm which shortly followed; and adds that should another case come under treatment, he would not hesitate to give large doses a fair and decided trial.

Sanitary Commission.

REPORT OF THE RESIDENT SECRETARY,

OF A PRELIMINARY SURVEY OF THE CAMPS OF A PORTION OF THE VOLUNTEER FORCES NEAR WASHINGTON.

(Continued from page 61.)

Personal Cleanliness.—In but few cases are the soldiers obliged to regard any rules of personal cleanliness. Their clothing is shamefully dirty, and they are often lousy. Although access is easily had to running water, but few instances are known where any part of the force is daily marched, as a part of the camp routine, to bathe. A careful daily inspection of the state of the men's clothing is probably made in few, if any, regiments. Whatever good qualities they possess in other respects, so far from being good soldiers in this, which has been long held the elementary condition of good soldiers, our volunteers are, in many cases, really much dirtier than it can be believed they have been accustomed to be in their civil life; and it is obvious that neither they nor their officers comprehend in the slightest their duty in this particular, nor the danger and inconvenience they are bringing upon themselves by its neglect. The clothing of the men from top to toe is almost daily saturated with sweat and packed with dust, and to all appearance, no attempt is generally made to remove this, even superficially. Each man should be provided with a switch or small cat with which to whip his clothing, and a brush to remove the dust after it has been brought to the surface. It is suggested that these and other instruments of cleanliness should be provided to the men, as in the French service, and that they should be required to carry them and exhibit them at inspection, as a part of the Government property for which they are responsible.

CAMP POLICE.—There is often hardly a pretence of performing the ordinary police duties of a military camp. The men take food into their tents, and its crumbs and morsels are to be seen covered with flies in the inside, in the intervening spaces, and even in the camp-streets, which seldom appear well swept. Often the drains are so neglected, that they become receptacles for rubbish. Within the tents a musty smell is often perceptible. It is suggested that the Commission should recommend that orders be given that during the summer all camps should be shifted at least once in ten days, unless imperative military reasons forbid, and that twice a week all tents should be struck, turned inside out and shaken, all bedding and blankets shaken, the site of tents swept, and, if practicable, sprinkled with a disinfecting fluid or lightly strewn with powdered charcoal or plaster of Paris. It is believed that some very detailed instructions in camp-police duties may with great advantage be furnished the officers.

CLOTHING.—The volunteers have generally an abundance of clothing, such as it is, though there are a few who have not a change of shirts. The dress of the majority is inappropriate, unbecoming, uncomfortable, and not easily kept in a condition consonant with health. It is generally much inferior, in every desirable respect, to the clothing of the regulars, while it has cost more than theirs. Considering all the conditions and contingencies of the business in which the volunteers are about to engage, and in view of the many advantages of simplifying all the machinery of the army as much as possible, it may be best for the Commission to recommend that volunteers for ordinary infantry service be hereafter required to adopt the regulation uniform. This could be furnished by the Government under bonds to those recruiting the regiments, or to the State governments called upon or undertaking to supply them, at a much less price than, judging from recent experience, any other tolerable uniforms can be procured by special contract. It may also be best to recommend the early substitution of the regulation garments for those now worn by the volunteers; these being already, in many instances, in bad condition. A New York soldier has been seen going on duty in his drawers and overcoat, his body coat and pantaloons being quite worn to shreds. It is possible that some modification of the present regulation uniform may be made with advantage. If so, this should be in the direction of greater simplicity of parts, greater independence of the baggage wagon, and more grace of appearance. The most conspicuous part of the present uniform is the hat. It is said to be convenient and healthful. The common kepi of the volunteer is pert, unsubstantial, ungraceful, uncomfortable, and dangerous. Covered with what is called the havelock, it is excessively conspicuous—quite unfit for scouting or skirmishing duty. It interferes with the hearing, and, through the common neglect of duty of the volunteer officers, it is allowed to be worn without uniformity, and becomes very untidy. The regulation hat, as it stands, is better than any other military head-dress to be now seen in Washington. Yet its heavy and inelegant character might, it is hoped, be somewhat modified without lessening its essential value. A slight enlargement of the brim, a more tapering form to the crown, and the introduction of some color, possibly making the whole hat of a neutral tint, with a complementary band or plume, would certainly effect an æsthetic improvement. A different kind of shirt might economically dipslace the present one, which is coarse and harsh in quality. The regulation shoes and socks are far superior to those generally worn by the volunteers, but might perhaps be better. A very slight improvement in the quality of these articles would justify a large additional cost. The French trappings of the soldier, of the latest pattern, seem to be more substantial and convenient than those of the United States regular pattern, better calculated to preserve health and a certain degree of comfort under circumstances which most try the strength and *morale* of the soldier. If this is the case, Government should not for a moment hesitate to adopt them. Our volunteers are generally men unaccustomed to the necessary hardships of the soldier, suffering from loose discipline, and the rashness, improvidence, ignorance, and neglect of extemporized officers. They need, therefore, far more than regular soldiers, every advantage which it is possible for science and art to offer, for bearing about with them, in the easiest possible manner, means of sustaining their strength, which shall be proof against accidents and available under the greatest variety of circumstances. To simplify what is to be carried as far as possible, and yet to make the soldier more than ever independent of fortune, must be the purpose of all suggestions for a change. No improvement is so great as that which lessens the necessary recurrence of the soldier to the baggage train and the hospital. Whatever does this must almost certainly be economical.

FOOD.—*De gustibus non disputandum.* No two reports agree, and the Secretary, having given more time to the study of the subject than to all others during the last week, confesses himself to be yet bewildered by the different statements of matters of fact, and the different judgments on matters of opinion which he has constantly encountered. Where there is not a most incredible ignorance, incapacity, or neglect on the part of the officers, the regiments are supplied with an over-abundance of the raw material of food, excellent of its kind. To all appearance, the Commissary Department is pursuing a generous, wise, and liberal course, dispensing with the usual forms and checks, anticipating and overlooking the neglect of the volunteer officers, and supplying a larger variety of food than is usually served to regulars, or than can be drawn for, as a right, under the army regulations. This very laxity, however, has its disadvantages, and that regiments should sometimes meet with considerable hardship from irregularity of supplies is a matter of course. It is, indeed, wonderful that such a large body of men should be so fully and regularly supplied as is our army, and the Commission need hardly concern itself with the exceptional instances. It is doubtful if any army of the same size ever fared as well as to substantial articles of food, for months together. The raw materials furnished are generally atrociously cooked and wickedly wasted. In consequence of waste, complaint is sometimes made of inadequate supplies, but this is remarkably rare, proving that with care the supply would in all cases be over-abundant.

The question remains whether the food is of the best kind that could be afforded, and in sufficient variety? There are grave objections to the introduction ot almost any new article into the dietary of the army; simplicity, and facility of transport and of preservation, being necessary conditions not only of each article in itself, but of all the ration in the aggregate. To increase the number of articles is to increase the duty already heavily overburdening the Subsistence Department; and there are great and insurmountable difficulties in enlarging the force of the Subsistence Department with the rapidity required to provide for all the contingencies of the heterogeneous host, with its incapable officers, suddenly dependent on that department for the sustenance of life. It is a great thing to accomplish the provisioning of this host with the simplest and most easily procured and transported food, by any possible means. It is a still greater thing to have this done honestly and thoroughly well, guarding against scandalous frauds and great and disgusting wastes. Every addition to the dietary of the army increases the difficulty of this task. This must not be forgotten in the consideration of the thousand and one improvements on the ration which have found and will continue to find public advocacy, and some of which are being now especially urged on the Commission as worthy of its recommendation. It is daily made obvious that no intelligent civilian deems the present regulation ration a suitable and sufficient one for the volunteers, called from the north to the south in the heat of summer; but rash and arbitrary changes might easily be made which would be extremely perilous.

(To be continued.)

Army Medical Intelligence.

APPOINTMENTS.

Kentucky Regiments.—1st Reg. Vol., Surgeon, S. G. Menzies, of Cincinnati; Assistant, G. R. White, of Ky. 2nd Reg. Vol., Surgeon, John F. White; Assistant, S. P. Bonner.

Indiana Regiments.—6th Reg., Surgeon, Charles Schüssler, Madison; Assistant, John W. Davis, Vincennes. 7th Reg., Surgeon, George W. New, Indianapolis; Assistant, William Gillespie, Rising Sun. 8th Reg., Surgeon, James L. Ford, Wabash; Assistant, George W. Edgerlee, Muncie. 9th Reg., Surgeon, Daniel Meeker, Laporte; Assistant, M. G. Sherman, Michigan City. 10th Reg., Surgeon, Thomas P. McCrea, Logansport; Assistant, William H. Myers, Fort Wayne. 11th Reg., Surgeon, Thomas W. Fry, Crawfordsville; Assistant, John C. Thompson, Terre Haute. 12th Reg., Surgeon, William Lomax, Marion; Assistant, Isaac Caselberry, Evansville. (State Service.) 13th Reg., Surgeon, Ferdinand Mason, Grandview; Assistant, Alois D. Gall, Indianapolis. 14th Reg., Surgeon, Joseph G. McPheeters, Bloomington; Assistant, George W. McCune, Rockville. 15th Reg., Surgeon, Richard C. Bond, Aurora; Assistant, J. Milton Youart, Lafayette. 16th Reg., Surgeon, Elias Fisher, Richmond; Assistant, Geo. F. Chittenden, Anderson. (State service.) 17th Reg., Surgeon, John Y. Hitt, Greensburg; Assistant, David H. Henry, Goshen. John S. Bobbs, Medical Director.

Ohio.—The Board of Medical Examiners of Ohio, Drs. Awl. Smith and Hamilton, of Columbus, have reported the following gentlemen to the Governor as Surgeons:

W. Clendenin, M.D., Joseph T. Webb, M.D., of Cincinnati; Norman Gay, M.D., Columbus; J. Y. Cantwell, M.D., Mansfield; R. N. Barr, M.D., Columbus; Francis Gaeter, M.D., Waterloo, Fayette Co.; M. M. Stimmel, M.D., Ada, Harding Co.; David Welsh, M.D., Glencoe, Belmont Co.; W. R. Thrall, M.D., Keokuk, Iowa; G. R. Weeks, M.D., Booneville, Seneca Co.; J. L. Crane, M.D., Ashland. Surgeons' Mates—Thomas H. Kearney, M.D., Thomas Neal, M.D., of Cincinnati; John McCurdy, M.D., Youngstown; Julius C. Schenck, M.D., Cleveland; Andrew Sabine, M.D., Union Co.; J. W. Cooke, M.D., Toledo.

Buffalo Physicians in the Army and Navy.—*New York State Volunteers.* Charles H. Wilcox, M.D., Surgeon, 21st Reg. Joseph A. Peters, M.D., Assistant, 21st Reg. Lucien Damainville, M.D., Assistant, 31st Reg., under Gen. McDowell. Aaron J. Steele, M.D., Assistant, under Gen. Mansfield. *United States Army.* Charles K. Winnie, M.D., Assistant, under Gen. McClelland. *United States Navy.* Samuel D. Flagg, M.D., Assistant, U. S. Naval Hospital, Brooklyn. Newton L. Bates, M.D., Assistant; waiting orders. William Howell, M.D., Assistant; waiting orders. Ira C. Whitehead, M.D., Surgeon, Revenue Cutter "Vixen," cruising.

Maine.—Dr. Alonzo Garcelon, Hospital Surgeon, Dr. H. H. Hill, of Augusta, Drs. Wm. Wood and J. T. Gilman, of Portland, and Dr. J. C. Bradbury, of Oldtown, constitute the Medical Board of the State of Maine.

BATTLE OF BULL RUN.

ONE DAY'S EXPERIENCE ON THE BATTLE-FIELD.

Camp Pratt, near Alexandria, Va.,
July 26, 1861.

[Special Correspondence of the American Medical Times.]

I have had no time to write to you before, and I have scarcely the time now, but I have seized a few moments of leisure to give you a brief account of one day's experience upon the field of battle.

At half past two, Sunday morning, I was in my saddle, with my assistants by my side, and my ambulance was ready for the march. The column began to move at this early hour, but our Division, under General Miles, did not leave the encampment until after six o'clock A. M. We then followed the long train which had preceded us, and after a march of about three miles took up our position where the battle of the preceding Thursday was fought, upon the brow of a hill commanding a view of the whole valley in which lay the forces of the enemy. The 32d and the 16th New York Volunteers were ordered to support Lieut. Pratt's battery, Col. Pratt, of the 31st, acting as Brigadier-Gen. or commanding officer, while Lieut.-Col. Brown took charge of our own regiment, the 31st; subsequently Col. Pratt took charge of his own regiment and was ordered to support Major Hunt's battery.

As soon as the troops were fairly in position the batteries opened upon the enemy with shell, solid shot, grape, and canister. Their fire was very effective, but it was not answered until late in the afternoon. In the meantime my assistants aided me in selecting a place along the wood, in our rear, where a pretty deep cut or gorge, leading a little off from the main road, would enable us to dress the wounded without exposure. We all went to work with a will, with the help of the drummer boys, and had soon cleared the gorge of stones and bushes. Here we proposed to have the wounded brought on stretchers by the drummers and a few volunteer aids, who together composed my ambulance corps. We then placed our ambulance above and beyond the gorge, in the direction towards a log-house, which was situated one-quarter of a mile further off in the rear. We took down the fences to let the ambulance pass, and planted our red flags at the temporary depot, and at the log-house. We were all ready when we received notice of an expected charge of cavalry upon that road, and were requested to select a building on the opposite side of the road, as the enemy's batteries would range across the old log-house. Accordingly we hastened to make the change, and in a few minutes we had everything as well arranged in a snug wooden house, occupied by negroes, as if we were in Bellevue. The operating table was ready, the bed arranged, and the instruments, sponges, bandages, cordials, &c., in order.

I now rode back to the field, and found we had had one slight skirmish, in which one man of the 16th had been wounded in the head, which Dr. Crandell, of the 16th, had already dressed. It was past mid-day and we were all tired, hungry, and thirsty. Exploring a garden in front and to the right of the batteries I found cabbages, beets, parsley, onions, sage, and potatoes; near by were chickens, and smoked hams in a deserted lodge. Water we found one-quarter of a mile to the left on the borders of the woods, within which lay the enemy, but the drummers brought water, and with the help of Mr. Nourse, Dr. Marvin, and my son, we soon made about four gallons of the best soup I have ever eaten. We had salt and pepper to season it, and good appetites to welcome it. We made also a large coffee-pot full of coffee, and found sugar to sweeten it. This we carried to the rear and fed out first to the Col. and his staff, and then to the line officers and men, as far as it would go, not forgetting ourselves and the drummer boy.

After this precious repast we carried whiskey to those soldiers who had been skirmishing, or who seemed especially to need it; for they were without shelter, under a sky of brass. To those who called for it also we sent or carried water in pails—such water as we could get. The men never left their lines, except when ordered to act as skirmishers, and must have perished except for some such refreshments.

At about four or five P. M. a message was sent to us that the enemy were retreating, and that the day was ours, and I immediately returned to my hospital to order, of the black inmates of the South, supper for the Colonel's staff and my own. I was standing at the door, looking out towards the road, when I saw the regiments approaching in order, but rather rapidly; at the same moment came an order from Dr. Woodward, the intelligent and faithful medical director of our division, for me to fall back with my hospital to Centreville, about one mile further back, as the enemy were making an attempt to flank us on the left, in the direction of our division. I immediately had every thing replaced in the ambulance, and having paid Maria, the black woman, whose dinner we did not eat, we started for Centreville. We went along the same road with the troops, who were moving in good order, and without any appearance of alarm. At Centreville I took out my amputating case, general operating case, and medicine chest, and finding a large number of wounded already here, proceeded at once to dress their wounds, extract the bullets, etc. We were occupied for an hour or more in an old tavern. My assistants here were Dr. Lucien Damainville (first Assistant), Dr. — Brown, Mr. Marvine, medical student, Mr. Nourse, and my son Frank, who had been acting most of the day as the Colonel's aid. I think Dr. Arnt, of one of the Michigan regiments, was with us at this time. We had no bandages, no lint, no sponges, no cerate, and but very little water, and I think only one basin. Our first attention was directed to those already in the house. Stooping down as they lay crowded upon the floor, we inquired, "Where is your wound, my poor fellow?" for they seldom called us until we came to their relief, nor did many of them utter a moan. There they lay silent, waiting their turn. Most of the wounds were made by spherical balls—some had gone through entirely, without breaking a bone or severing an artery—and to them we said, "Bravo, my boy, a noble wound, but no harm done. Mr. Nourse, apply a cloth, wet with cool water." Not a few, encouraged and strengthened by these words, got up, and came on foot to Alexandria and Washington. I saw several at Fort Runyon, from whom I had extracted balls from the neck, arms, and legs, the next morning when I arrived there, and they had walked the whole distance. Three or four had balls through their bodies, and had walked two or three miles to the village; one was brought up with a wound in his thigh, who had lain on the field since the Thursday preceding. He will recover, I think.

From this building we went to a private house, which was also full, and then to the old stone church. Here I met Dr. Taylor, of the 1st New Jersey Regiment, who was laboring most industriously, and Dr. ——, a private, a very intelligent man, belonging, I think, to the 2d Michigan, and who, for his extraordinary zeal and attention, deserves great credit.

In the old stone church the men were lying upon every seat, between all the seats, and on every foot of the floor; a few on stretchers, perhaps three or four; a dozen or more on blankets—occasionally upon a litter, hay or straw, but mostly on the boards.

The scene here was a little different; it was dark; we had but two or three tallow-candles. The men had been waiting longer, and were in general more severely wounded; and, although now and then a man asked us to pass him, and to look first after some one lying near who was suffering more, yet from all sides we were constantly begged and implored to do something for them. After a little we concluded to take them in order as they lay, since to do otherwise rendered it necessary to consume time in going backwards and forwards, and we were constantly in danger of treading upon the wounded; indeed, it was impossible to avoid doing so. By this time we had found a hospital knapsack, and were pretty well supplied with bandages; but the time did not allow us to do much more at first, than to extract the bullets, and apply cool water dressings, with lint.

Only two amputations were made by myself; one below the knee, and one above the elbow-joint. Both of them, I confess, were done very badly, but I could, at the time, and under the circumstances, do no better. My back seemed broken, and my hands were stiff with blood. We still had no sponges, and scarcely more water than was necessary to quench the thirst of the wounded men. My assistants were equally worn out—Dr. Taylor alone seemed vigorous and ready for more toil.

At half-past twelve, or about that time, we went out to get a candle, to enable Dr. Taylor to amputate a man's arm at the shoulder-joint. Just then a regiment came up, and the Colonel was challenged by the picket. This reminded me that if we were to stay all night, as we had mutually agreed to do, we should need the countersign; but although we told him we were medical men, in charge of the wounded, and intended to stay, this was refused to us. The colonel told us that his was the last regiment covering the retreat.

We obtained a candle and went to the house where lay Dr. Taylor's patient, with his arm terribly shattered with a cannon ball or fragment of a shell. It was nearly torn off near the shoulder-joint, but the hæmorrhage was trivial. He was dying of the shock. We gave him whiskey, the only stimulant we had, with water, dressed the wound slightly, and left him to his fate.

Dr. Damainville and I now lay down upon our backs upon the floor beside the wounded—we could do no more—our last candle was burning. Some of us had seen all the wounded, probably 250 in number, and done for them all that lay in our power. I had drunk some buttermilk and eaten a sandwich that Adjutant Washburn had held to my mouth once in the evening, but none of us had had any other food. I had sent Adjutant Washburn to overtake Gen. McDowell early in the evening, and to represent our condition, but he could not find him, and returned without help. The two bottles of whiskey taken by my son from the ambulance when we first came were already nearly distributed to the wounded. They had not a morsel to eat, the ambulances were all gone and had been for several hours. As we went into the street again, we found it was silent as the grave—the pickets even were gone, and except a few men so soundly asleep under the trees that we could not awaken them, there was no one left in the road. After a second consultation we determined to go also. My assistants and myself soon found our horses, but the servant was gone, and with him the bridles, nor could we after much search and loud and long shouting find him. I went back to the old stone church, and found one soldier just brought in, whose wounds I dressed, and then said aloud to the poor fellows within: "Thank God, my boys, none of you are very seriously injured; you will probably all get well." To which I heard one or two feeble responses: "Thank you, Doctor, thank you." I could not tell them I was about to leave them, and I trust in leaving them so I did them no wrong. I could be of no more service to them until morning, and then I presumed they would be in the hands of a civilized and humane enemy who would care for them better than we could. As I passed along out of the village I requested one gentleman who lived there to look after them, and also a family composed of a man and wife with two daughters. They all promised to do what they could.

Our instruments we could not take. There were five of us and two horses, and my son had sprained his ankle and could scarcely walk, so we went on towards Fairfax Court-House, and in half an hour we began to overtake the rear regiments, and soon I saw Dr. Woodward's cheerful face begrimed with dirt like our own. I told him how we had left the wounded. There was no remedy, said he. They must be left. We hurried on and at Fairfax Court-House overtook Gen. McDowell, to whom I at once reported the condition and number of the wounded, and requested to be sent back if he thought it best. He replied, "You have done right, keep on to Washington." As I was leaving the gate he sent a messenger to call me back, and to ask me if I were walking. I replied that I was. "Gen. McDowell has here ten or twelve ambulances," said he, "for the wounded, which he obtained by a dispatch to Washington. He wishes you to ride." From Fairfax I rode until our ambulance broke down, filled with wounded. The wounded were transferred to another ambulance, and I again took to my feet and occasionally to my horse. I reached Fort Runyon, opposite Washington, at about 10 A.M., and here washed my bloody hands and arms, for here I found the first water.

The wounded were scattered the whole distance from Centreville to Washington, not in large numbers, but here and there one could be seen walking by the aid of one or two associates. In reference to the ambulances, the occasion of their absence from Centreville was simply, that the drivers became frightened, and to turn them back would have been impossible. Nor do I think it would have been possible for Gen. McDowell to have sent one vehicle back beyond Fairfax at the time I saw him.

It is remarkable that most of the wounds seen by me were not of a character which would be likely to prove fatal. Perhaps the men most severely wounded were left upon the field, or were dressed by those noble surgeons who were near them, and some of whom lost their lives, while others gave themselves up as prisoners.

In no case did a wound seen by me require the use of a tourniquet, although some soldiers had their limbs tightly girded so as to have already occasioned great swelling and pain.

Most of the balls extracted were spherical; and of those which I removed, the majority were removed through counter openings, the balls lying close against the skin.

Nearly all the soldiers that I have seen since the battle, in Washington and Alexandria, are doing well.

I must not omit to state that after I had left, and when I supposed our whole party were in front of me, Mr. Nourse, acting assistant apothecary in our regiment, went back with three horses, and placing three wounded officers upon them, sent them off, for which he would accept of no compensation. He then walked himself the whole distance to Alexandria. This, with many other signal instances of this young man's courage, endurance, and humanity, deserves an especial notice.

My own regiment having, under its excellent commander, Col. Calvin E. Pratt, of Brooklyn, N. Y., covered the retreat of most of the forces, and especially of Hunt's Battery, which took up a new position near Centreville early in the evening, left the ground at 11 P.M., and returned in perfect order to its old encampment near Alexandria. Before they left they received five successive volleys from the enemy's infantry, but not allowing their own fire to be drawn they saved themselves and their battery from being overwhelmed and taken. I must regard the coolness and discretion of Col. Pratt under these circumstances, as the highest evidence of his capacity as a military commander.

FRANK H. HAMILTON,
Surgeon 31st Regiment, N. Y. St. V.

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CAMP BUTLER—NEWPORT NEWS.

DEFICIENCY OF HOSPITAL SUPPLIES—NO AMBULANCES AT THE BATTLE OF BETHEL—TIME REQUIRED TO PREPARE VOLUNTEERS FOR SERVICE—PROPER BUILDINGS FOR TEMPORARY HOSPITALS—PREVAILING DISEASES—MEASLES—VARIOLOID—FEMALE NURSES NOT DESIRABLE—LIST OF SICK FOR JUNE.

(Concluded from page 64.)

EVEN now, after three months' time to provide for this increasing army, the Government supplies for hospital furniture are entirely insufficient. As an example which may serve as a general indication of the style of doing things at Fort Monroe, I will give the following cases happening under my own observation. The Vt. Regiment, as is well known, has been suffering from measles, and the usual pulmonary sequelæ; up to the present time, there having been 116 cases, in most cases owing to exposure in camp under the wonderfully variable temperature of the shores of James river. Severe bronchitis, simple and tuberculous, followed convalescence in a great proportion of the cases, and the demand for simple expectorant combinations was enormous—gallons per week. Now the supplies of squills, paregoric, tolu, have never been sufficient for one regiment. Last week 2 oz. syr. squills was the entire quantity at the post, where twelve thousand men look for their supplies. No Peruvian bark, nor tinctures or other preparations of this standard remedy, except quinine. After great delay and repeated effort a small quantity was purchased at Baltimore to meet my extraordinary case. Up to within one week there has been no ambulance or wagon of any shape to send into the field. At the battle of Bethel no conveyance of any description could be sent with the force from this point for the benefit of the wounded, though the force was a thousand strong. And to make the burlesque on military organization complete, the flag of truce that was sent next day to ascertain the fact of Winthrop's fate, was displayed from the roof of a carriage that had been brought in as plunder from the very region where this emblem of purity and peace was sent on its merciful errand. It certainly spoke well for the bravery of the gallant surgeon who volunteered to accompany this incongruous equipage. Of late, however, horses, ambulances, wagons, &c., begin to make their appearance, and probably the delay in reinforcements, seemingly so unnecessary and provoking, will in the end result in the general good of the medical department of the army, as it is manifestly doing in the others. From my personal observation I should judge that no volunteer regiment is fit to take the field against the enemy under three months. It takes full that time for the men to get acclimated and inured to their entire change of living; it takes all of that time for the cooks to learn to economize their food, to cook it so as to make variety, and have it savory and acceptable to the palate. In three months the regiment will have been weeded of its unsound and unserviceable men. Whether in that time men will learn to maintain the order of their ranks under fire, and not retreat or charge as a rabble, is a question equally important, but one rather out of my line. That bravery and indifference to danger is spontaneous in our men, there is no doubt. The important question, in a sanitary point of view, that presents itself to the medical staff of an advancing column, is the disposition of his sick. Unoccupied dwellings can be taken for hospitals, but they are inconvenient, crowded, ill-ventilated, and not always to be had within protected lines. The hospital tent is the next resort, and with flooring and light iron camp-bedsteads and bedding is in most cases, particularly in eruptive diseases, superior to the ordinary dwelling. In wet weather, however thick the canvas, the air is misty and damp, and the patient is not sufficiently protected.

I am satisfied the best camp hospital is the one constructed after the pattern of the *fever-sheds* that were so extensively used on quarantine grounds some ten years since.

For some weeks after intrenching ourselves at this point, my average number of cases of measles in hospital was twenty, and there was no building within the lines proper or sufficient to hold them; neither could a hospital tent be procured at Fort Monroe. Sawed lumber is a scarce article at the South, it mostly being brought from New England; and it was not an easy matter, I found, to get material to build a hut. I finally succeeded in getting enough of Southern pine scantling from the fort to construct a building, 25 feet long, 18 feet wide, 16 feet high at wall, 22 feet extreme height at ridge pole. These boards were scratched roughly for the walls, and lapped for the roof; sliding wide doors at each end, and sliding shutters for ventilation under the eaves. It was wide enough for two rows of iron camp bedsteads, with a space or alley through the length, of three feet width. Now although this building will leak somewhat in a shower, and you look out of the cracks between the boards, still on a hot day, with the breeze blowing through the sliding doors at the end and by the ventilators, it is the coolest place in the camp, and the balsamic fragrance of the new pitch pine lumber is a very grateful substitute for the musty and close odors from ill-constructed dwellings, or the heated vaporous atmosphere of the close tent, its dazzling white canvas bleaching under a temperature of 100°. In building this hospital the carpenters were taken from the ranks, and no iron or finishing material except nails used in its construction, for the simple reason that such things were not to be had. An order for a padlock to lock up hospital stores, was such a wild piece of presumption, and created such commotions in several of the departments, that it was found necessary to fall back on the latch and string, with the string always in. I think this is the kind of hospital for the field, and being made in sections of light panelling, it could be loaded with all the furniture for twenty patients on two or three wagons, and readily be put together by screws when wanted. The hospital I have constructed in the way described, is unnecessarily cumbersome, to be portable, but it could be carried in three army wagons, and put up in a very short time. It has fourteen beds, and, by crowding, could accommodate more. The Vermont 1st Regiment has probably been more afflicted with sickness than any yet taking the field; mainly on account of measles, of which there have been 112 cases, pretty equally distributed through the companies. At one time there were thirty cases of this disease in hospital at once, and while the epidemic was in a company, the turn-out of muskets at evening parade or battalion drill, would not exceed twenty-five for the company. As a general thing the type was mild. In a few cases were exhibited a tendency to the petechial variety, requiring active administration of stimulants. A great many cases resulted in a tedious convalescence on account of pulmonary complications. Not a few cases have been followed by signs of incipient phthisis. Not a case has been fatal in its acute stage. One died after convalescence, and a relapse with typhoid symptoms complicated with *home-sickness*, of the most persistent and depressing character. This has been an element recognised from the first, and complicating all varieties of disease, and in many instances it was the main disease next to measles. Diarrhœa, and dysentery, and typhoid fever, have been the diseases of importanc, and in the order they are enumerated.

In this camp there have been five well marked cases of varioloid, two perhaps being classed under the head of discrete small-pox. One of the cases (the last now convalescent) was a colored servant, who had care of the previous cases. The first case was early discovered in the N. Y. 7th Regiment (Germans), and isolated completely, and treated with secresy, so that even with the cases following, there was no general knowledge of the disease being present among the soldiers. Immediate measures were taken to vaccinate the troops, and lately, by order of Gen. Butler, they have been inspected carefully with regard to this point, by Dr. H. A. Martin, of Roxbury, Mass, an adept in the art The region of country about Newport News is unquestionably malarial. The testimony of the slaves is to this effect; some cases of intermittent have already developed themselves. As regards the question of nurses that is now agitating the philanthropic world, my testimony is against the sex, except they be colored and *contraband*. The cook and matron of my hospital, from its establishment at this port, has never given occasion for reproof or complaint. She is a bright, active, young slave (or lately was), whose master has run away, leaving her to look after herself. In general hospitals, in large towns, &c., female nurses are desirable, but in detached posts, like this, they are out of place entirely. I subjoin an abstract from the post sick return, from this station, for the month of June, giving an idea of the account of sickness for the month:—

Camp Butler, Newport News.
Month of June.

Total number of sick reported for the month, .	1768
Remaining sick, and convalescent, July 1, . .	126
Deaths, ...	0
Total number of cases treated in the 1st Regt. Vermont Volunteers:—	
In Quarters, ...	421
" Hospital, at Post, ...	111
" General Hospital, Fortress Monroe, . . .	20
Total, ...	552
Deaths, ...	0

Of the above cases treated in Hospital, 57 were measles.

Regiments stationed at Camp Butler:—

1st	Regt.	Vermont Volunteers.
7th	"	New York Steuben Volunteers (German),
1st	"	New York.
4th	"	New York Scott Life Guards.
9th	"	New York Zouaves.

Respectfully yours,
E. K. Sanborn,
Surgeon 1st Vermont Regiment,
Acting Post Surgeon, Camp Butler.

July 20, 1861.

Medical News.

Commencement Exercises of the Long Island Hospital.—The second annual commencement exercises of the Long Island College Hospital took place at the Athenæum Tuesday evening, July 16th. A large and select number of ladies and gentlemen crowded the auditorium, while upon the platform were many of the prominent physicians of Brooklyn and New York. Dr. W. H. Dudley, one of the Regents of the College, presided. The proceedings were opened with prayer by the Rev. Dr. Buddington. Dr. Dudley then stated that the following students had assiduously devoted themselves to their studies, and having passed a satisfactory examination, he duly presented them to Dr. S. L. Mason, the President, who was to confer on them the degree of Doctor of Medicine: Charles T. Ingersoll, J. R. Toumey, J. R. Holloway, Edward H. Duggan, Jared W. Scudder, Edwin Gray, Howard A. Gates, J. J. Vanhoesen, James Healy, Edward A. Brown, Edward P. Colby, Benjamin H. Kidder, W. W. Sherfy, and George W. Davis. The students presented themselves on the platform, where they received the salutatory, delivered by Dr. Mason in Latin, and their diplomas. Dr. Mason and Professor Enos addressed the graduating class. Dr. T. C. Ingersoll, of the graduating class, delivered the valedictory.

Medical Corps of the Navy.—The following gentlemen have passed a successful examination before the Naval Medical Board, convened at the Naval Hospital, Brooklyn, and will have their rank assigned in the following order.

1. A. Mathewson, Conn., Univ. Med. College, N. Y.
2. A. C. Rhoades, New Jersey, College of Physicians and Surgeons, N. Y.
3. Michael Bradley, Pa., Philadelphia Med. College.
4. Newton L. Bates, N. Y., Univ. Buffalo, N. Y.
5. Fred. E. Potter, N. H., Burlington Med. College, Vt.
6. Adrian Hudson, N. Y., Univ. Toronto, Canada.
7. Wm. Howell, N. Y., Buffalo Med. College, N. Y.
8. Jas. H. Tinkham, N. Y., Univ. Med. College, N. Y.
9. Alex. Hutchings, N. Y., N. Y. Med. College, N. Y.
10. Charles O. Carpenter, Mass., Berkshire Med. College, Mass.
11. John Willson, Pa., Univ. Pa., Pa.
12. Samuel D. Flagg, N. Y., Jefferson College, Pa.
13. W. R. Richardson, Maine, Dartmouth College.
14. A. W. H. Hawkins, Pa., Univ. Pa., Pa.
15. H. D. Burlingham, N. Y., College P. and S., N. Y.
16. Henry M. Wells, Mass., Univ. Pa.
17. J. Otis Burt, College P. and S., N. Y.
18. Wm. C. Lyman, Mass., Berkshire Med. College.
19. Wm. W. Leavitt, Mass, College P. and S., N. Y.
20. J. H. Gotwald, Ohio, Univ. Pa.
21. J. H. Macomber, Mass., Berkshire Med. College.
22. Ed. S. Bogert, N. Y., Univ. Med. College, N. Y.
23. Grove S. Beardsley, N. Y., Univ. Med. College, N. Y.
24. Thomas H. Whitney, N. Y., N. Y. Med. College.
25. A. B. Judson, Pa., Jeff. Med. College, Pa.
26. James S. Knight, Delaware, Univ. Pa., Pa.
27. Walter K. Scofield, Conn., Yale College Med. Dept.
28. Henry Ackley, New Jersey, Jeff. Med. Coll., Pa.
29. A. O. Leavitt, N. H., Dartmouth College.
30. Edw. M. Stein, N. Y., Univ. Pa., Pa.
31. Edw. S. Mathews, Pa., National Med. Coll., D. C.
32. Charles H. Covell, N. Y., Coll. P. and S., N. Y.
33. J. Russel Little, N. Y., Univ. Pa., Pa.
34. W. Lamont Wheeler, N. Y., College P. and S., N. Y.
35. Walter B. Dick, Pa., Univ. Pa., Pa.
36. Aaron S. Oberly, Conn., Yale College Med. Dept.
37. Samuel B. Tuthill, N. Y., College P. and S., N. Y.

The Board continue in session to examine candidates for the Medical Corps of the Navy, to fill up the number required by the recent act of Congress, increasing the list of Assistant Surgeons in the Navy from eighty to one hundred and twenty. So favorable an opportunity to enter the Medical Corps of the Navy, has never occurred before. Candidates should apply by letter to the Secretary of the Navy, stating age, birth-place, residence, and accompany their request to appear before the Board for examination, with testimonials of moral character.

Domestic Items.—Dr. J. Marion Sims has gone to Europe with the intention of returning in the autumn. Dr. William H. Mason, now in Paris, has been appointed to the Chair of Physiology and Microscopic Anatomy in the Buffalo Medical College. Dr. Austin Flint, Jr., Professor of Physiology in the Bellevue Hospital Medical College, has returned from Europe.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

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Lecture V.—Part I.

Is dentition a disease or a cause of diseases, in itself—Opinions in ancient times—In the middle ages—Names of men who early denied both assumptions—Local irritation considered as the cause of the diseases supposed to be the direct effect of dentition—Nature, locality, and action of this supposed irritation, in the opinions of the authors.

The belief that the formation and protrusion of teeth are morbid processes, or give rise by their own nature to a large number of diseases, is by no means so old as we are apt to suppose from the general prevailing opinion. Old Hippocrates has a few remarks on the subject, but he cannot, from the few words that are found in his works, be presumed to have cherished the opinions of more modern doctors. For his remarks are, that "In those children who have proceeded to the age in which they get teeth (*πζος δε το οδοντοφυειν προς αγουσιν*), there will occur a disagreeable itching in the gums, fever, convulsions, and diarrhœa, particularly at the time in which the canine teeth will protrude, and in such children as are very fat and suffer from costiveness." And he further states as his experience, that, "such as have diarrhœa during dentition, will suffer less from convulsions than such as are costive. Such who suffer severely from fever, will be less affected with convulsions than those who keep their flesh and weight, and feel inclined to sleep. Such as get their teeth in the course of the winter, are better off under equal circumstances. Not all those who have convulsions during dentition, will die, but a number will be saved. Those who have a cough during dentition, require a long time before they are through, and will emaciate more considerably. Those whose teeth will protrude in the winter, suffer less than others." Nor has Celsus any remarks showing that he considered the process of dentition a disease or a cause of diseases; Galen only, in his commentations on the aphorisms of Hippocrates, thinks proper to state that diseases may be the result of the irritation produced in the gums by the protruded teeth. This theory has prevailed in the middle ages, both among the profession and the public of all countries, not from its being proved, but only because it was not examined; or rather because medical science and natural philosophy made no progress, or very little indeed, for more than fifteen centuries after the death of Galen and Aristotle. There is, however, a remark in the work of Mercurialis on the diseases of children (1584), which shows that the minds of eminent men will not always be clouded by prejudices though old and general. He states, that he cannot help having some doubts, although he feels some hesitation in pronouncing them, as to how dentition could be a disease; as it certainly is as clear to comprehend that nature does not intend nor willingly create disease; and dentition is a "mere work of nature, that is to say, a physiological process, and for this reason, must not be called a disease." And Heister, in 1753, has the following: "When symptoms, like pain, crying, sleeplessness, fever, convulsions, and epilepsy, occur, it is sometimes really difficult to learn where they come from, and from what cause, as they will depend on a variety of causes. Therefore all such symptoms must be weighed in your mind with the utmost sagacity, until you are able to say, for certain or with every degree of probability, whether they arise from bad milk or from other causes."

There are some names in literature, which ought to have the full credit for their endeavors to enlighten the profession on the nature of dentition and its pathological importance or unimportance. I would here mention the names of Wichmann, Sternberg, and Buchheim, and also Brefeld. But in order to understand, against which and how many prejudices they had to battle, it will be necessary to state some of the opinions spread amongst the profession, in whose minds there was no doubt that the irritation produced by the protrusion of teeth gave rise to diseases. The profession only differed as to the explanation of the locality, nature, and mode of acting of this irritation, and you will find some amusement in comparing different opinions.

One would assume that there were a large number of nerves in the gums, and an extraordinary irritability resulting therefrom. Another, and an illustrious man too, would take it for granted that a layer of osseous matter, covered moreover with periosteum, would prevent the tooth from protruding from its cavity. The osseous layer was, besides, asserted not to adjoin tightly the circumference of the protruding tooth, which would permit air to enter and irritate the poor dental nerve. In the opinion of others the general irritation in dentition would be the result of the pressure of tooth and alveolus on each other, which is less comprehensive to common sense than any other explanation. Others again presumed that the gums, while retaining the tooth in or repelling it into the alveolar cavity, would exert a pressure on the nerve. One says, incisors give rise to a large number of casualties because they are so sharp and pointed; another, that the protrusion of incisors causes but a small number of casualties *because* they are so sharp and pointed. A third again says, diseases during the protrusion of the incisors are very frequent because some of these and the first molars cut at the same period in which the system is still very feeble and the gum very iritable; a fourth, that they are rarer than at the time of the protrusion of the molars and canines, because the gums are softer and all the fibres more tender. One declares that the protrusion of the incisors is not so dangerous because their point is sharp; the other, that the canine teeth are very troublesome; because again, their point is sharp; and a third, because it is not *quite* sharp. The same canine teeth prove very dangerous, in the opinion of one, because they grow very slowly, of another, because they protrude so fast; faster than the molar teeth, which cut with a broader surface but more slowly and gradually. At last another comes telling you, that molar teeth are very dangerous, because of this very broad surface penetrating the gum. But more dangerous than any of the molars or incisors are the canine, in the opinion of another busy expounder, because in its protrusion it is hemmed in by an incisor on one, and a molar tooth on the other side. There comes, then, a profound anatomist who discovers that there are folds along the upper margin of the gum which, when normally developed, will prevent any disorders and serious diseases; but the norm appears to be that their development is thoroughly abnormous—and that diseases during and in consequence of dentition are commonly found. A neuropathologist considers a cutaneous spasm to be the common cause of all the troubles; another denies the sensibility of the gums, but thinks proper to attribute to it a large amount of irritability. A follower of humeral pathology seeks for the cause of all the evils in the increased quantity and poisonous condition of the saliva, another in the suppression of the secretion of the salivary glands; a third, and one of the best names too, Hufeland, in the fever which is said to be absolutely required for the regular and normal progress of dentition. And at last a celebrated author also goes so far as to deny the existence of local influences in the gums to produce general diseases, but attributes them to the fact that during the protracted period in which teeth protrude, the general development of a large number of organs takes place contemporaneously, and that dentition disturbs its regular progress.

These and other opinions have been expressed, and warmly defended, as the origin of all those numerous, or rather numberless diseases of dentition. Buchheim, in an elaborate article published forty years ago, has, by ransacking the literature of the last and the first twenty years of this century, collected these and more theories of a similar kind, and exhibited an unusually interesting picture of contradictions and arbitrary assertions. I have abstained from giving the names of the authors of such theories as have been brought before you; but I have thought it just as well done to omit them, not considering these theories to entitle their inventors to immortality. Such as have no other claim to immortal fame, will soon be forgotten, and some of them have been forgotten already with the single exception of their names.

I was just about closing up the exhibition of these more or less queer, comic, or astonishing opinions concerning the cause of the numerous supposed diseases of dentition, when I remembered the great physiologist, pathologist, and public benefactor, M. Delabarre, of Paris. He has at last dissolved the gordian knot of that much tormented question all at once. What of inflammation of the pulp? he exclaims, what of compression of the periosteum, injured nerves, tension and rupture of the gums, and all other assumed causes of the diseases of dentition? Why is it, he asks triumphantly, that one sixth of all the deaths in infantile age occur from dentition? I have found it! Do you not see that before and during the protrusion of teeth the child brings its fingers to the gums? Would a child do so when or because it has pain in the gums? Certainly not; for if it had pain it would carefully avoid touching and pressure. Therefore, "que serait-ce, sinon une sensation de prurit, de denangeaison, de chatouillement?" What could it be, pain being out of the question, that induces the child to bring its fingers to its mouth? Why, a sensation of pruritus, or tickling. Now this pruritus of dentition will not be found, or not considerably, in normal cases of dentition; but in children with bad nutrition it is perfectly intolerable, and gives rise to the perturbation of all vital functions, sleeplessness, loss of appetite, dyspepsia, fever, diarrhœa, vomiting, and convulsions. Nor does the author of this ingenious theory pretend to say that all the children are equally subject to this dentition pruritus. Not at all. Those suffer most who are most ticklish.

If, perhaps, you cannot understand the logic of these assertions, their author will probably consider you incompetent. He may be right, as long as you do not know all the attending circumstances. The reason why this theory was invented is this, that M. Delabarre invented at the same time his dentition syrup, which is determined to cure the dentition pruritus, and thus to save a million of infants a year. It is but just to say that M. Delabarre knows more of this syrup than anybody else, as he has taken particular pains not to divulge its composition, but to prepare and sell it himself. Thus you have the wonderful sight of the powerful mind of a single ingenious man discovering two important things contemporaneously; viz. a morbid condition, or a disease, which is the cause of a legion of others, and besides, the infallible remedy. Which of the two he has discovered, or invented, first, "deponent saith not."

Observation on the Growth of Stumps.—Dr. G. M. Humphrey, in a paper read to the Royal Medical and Chirurgical Society, shows that the common impression that a stump keeps pace with the rest of the body in its growth, is erroneous. The rate of growth varies. If amputation of the thigh be performed on a young child, one-third from the lower end, the stump, when full growth has been attained, will not be more than a third as long as the other thigh. The instances in which the bone of a stump elongates so as to be troublesome and require a portion to be removed, are regarded by the author as quite exceptional.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. I.

"Mineral Waters offer us a strange picture. Beyond question more extensively used in the treatment of chronic diseases than any other form of medication, they are not less willingly swallowed by the patient than prescribed by the doctor; and yet one hears on every side that there is no subject to which practitioners in general are greater strangers; their prescriptious being most commonly founded on a notoriety, of the value or reasons of which they are ignorant." Such are the words (paraphrased) of a leading French authority in the first of his course of lectures on the subject, delivered at the Ecole Pratique, in Paris. If this is the state of the case in France, how much more strikingly is it so in England and America. Mineral waters are ignored in the courses of the colleges in these countries, and as for literature on the subject the shelves of a few libraries support a volume or two at most. The subject is confessedly a difficult one, and has not yet been approached in a manner calculated to elicit any satisfactory results, either in a purely scientific or essentially practical point of view. The German and French works on Balneology in general, as well as on individual springs, are counted by hundreds; some of them learned, elaborate, and practical, yet not affording the kind of guide we want. In addition to numerous excellent treatises by experienced men, the Hydrological Society of Paris has for several years published heavy volumes of Transactions; and at more than one hundred French springs, reside, during the season at least, official physicians who make a formal report of their observations each summer to the Academy of Medicine. As there are extensive public hospitals at several of these, devoted to the thermal treatment of chronic diseases, reliable statistics are thence forwarded with the reports. All such communications are referred to a committee of the highest rank as physicians and chemists, whose critical resumé of the whole subject is annually published. Thus it becomes easy to determine very nearly the exact value of treatment at each spring; for having no pecuniary interest in the matter, it is to be presumed that the reports of these officials present the facts, and are only open to the charge of inexact observation or enthusiastic exaggeration, a charge for which there exists but very little ground indeed. The same state of things exists, with perhaps less disinterested completeness, in Germany, where has long been published a periodical devoted exclusively to Balneology; and even the Ophthalmological Journal has its "balneological department."

Such facts connected with the literature of the subject would seem to prove that mineral waters are justly entitled to their great reputation; a view which derives still further probability from the circumstance that springs which were famous hundreds, nay thousands of years ago, have lost none of their popularity either with the profession or the public. Sultan Soliman, the "magnificent," was cured of the gout when all other means had failed, by the waters of Brusa, and these were in use more than two thousand years ago. Peter the Great was cured of the rheumatism at Spa, and that was famous before the commencement of the Christian era, and has given its name as a generic term applicable to any place where mineral waters are dispensed.

The use of the waters transported to a distance from the spring is necessarily of comparatively recent date, and yet such export, still growing year by year, has risen to the enormous figures of 400,000 bottles, per annum, from Kissingen, the same from Marienbad, 250,000 from Heilbrunn, and so on to the amount of several millions from the springs of the continent of Europe alone. So expensive a form of medication would soon have ceased to be employed did it not afford substantial advantages.

It is not irrelevant here to transcribe the words of one of the latest and at the same time most cautious of modern French writers on mineral waters, Armand Rotureau.* After enumerating the classes of diseased conditions in which the use of these agents is not merely productive of no good, but too often positively injurious, by way of agreeable contrast he exclaims: "In fact, how many pains of rheumatic origin, always annoying, and sometimes intolerable, have disappeared after a season of thermal treatment! How many lesions of sensibility or motility, *whether proceeding from material cause or not*, have been cured by the employment of the waters! How many palsies, even when acknowledged to depend on a remote apoplexy of the brain or spinal marrow, have ceased during a season at the springs! How many necroses or neuralgias, always so painful to endure, have yielded to the influence of a wary and intelligent hydro-therapeutic course! In how many scrofulous children has the temperament (constitution) been modified, and even completely changed at springs, without the help of which they were in danger of carrying through life the visible and indelible scars that other means are powerless to remove! How many dyspeptics have by the use of the waters recovered an easy digestion, how many hypochondriacs their lost gaiety? How many hemorrhoidal subjects have obtained perfect cure, or a moderate and salutary loss of blood (from the hemorrhoidal veins), or even the return of piles whose disappearance had deranged their health!! Finally, how many anemic, chlorotic convalescents have recovered their strength, and returned to their families without retaining a trace of their former debility or malaise!" &c., &c.

In every attempt to analyse the reputation of a mineral spring three elements must be recognised: the effects of the water internally administered, the endermic medication largely practised at most and exclusively at some stations, and the hygienic influences of travel, change of air and diet, and regulated exercise. At most German spas the change of all the common habits is radical and imperative. The prescriptions of the physicians, the customs of the place, and in some instances, as at Carlsbad, positive enactments, lend all the aid possible to insure the full measure of the hygienic element. A much neglected but very important consideration is the elevation of some sources above the sea level. Wilbad is thus elevated three hundred feet; Pfaffers, twenty-one hundred; Gastein, thirty-two hundred; the temperature of the springs at the former from 88° to 99° F.; at Pfaffers, 99¼; at the latter, 113 to 118¼; the saline contents of a pint of water, 3.61 grs. at Wildbad, of which 1.82 is common salt; 2¼ at Pfaffers, no element predominant; and 2¼ grs. at Gastein, of which 1.51 is sulphate of soda. These springs are therefore almost chemically indifferent; yet not only are hundreds of apparently hopeless cases, especially of contractions and paralysis, which have resisted all treatment elsewhere, annually restored to health or relieved, but a resort to either can by no means be prescribed indifferently. All sorts of superstitious notions have been broached to explain these facts, such for example as the doctrine of a mysterious essentiality in thermal heat, something different from common. Due investigation would doubtless reveal the very prominent part which *simple elevation* plays, and show that to be the real source of many powers that now seem mysterious. Any one who has watched in practice the remarkable morbid phenomena which accompany sudden excessive fall of the barometer, though only of an inch or less, or will reflect on those observed in rapid ascents, will be very ready to allow that the influence of bathing in a stream of warm water pouring out of the very sand on which one is lying, supersaturated with carbonic acid gas, is likely not only to be a powerful curative agent, but to be very much more powerful at an elevation of thirty-two hundred feet than it would be if to be found in the valleys or on the plains below. At such an elevation the barometer falls upwards of three inches, showing a diminution of one-ninth of the atmospheric pressure, or about three thousand pounds less than an ordinary man is exposed to at the level of the plains. The elevation of Gastein is moreover accompanied with a most thorough change of circumstances, the hygienic power of pure air, simple, wholesome, abundant food, new faces, good society, grand and picturesque scenery, a mountain torrent pouring its boisterous waters unceasingly down the ravine in which it is situated. We may be satisfied then that a philosophic investigation of the exact powers or value of the peculiar hygienic influences often absolutely necessary to be taken into consideration when discussing the propriety of sending a patient to any given source, would be a sufficient task to occupy capable inquirers quite as long and quite as profitably as either of the other two branches of inquiry.

The endermic treatment in vogue at most watering places, including mud baths and vapor baths, baths of carbonic acid and ammoniacal gas, baths in every variety of mineral water, not forgetting the last French novelty, that of inhaling what they call the dust of the water (a sort of mist produced by mechanical means), affords abundant opportunity for another investigation into the special powers of the balneo-therapeutic method; the best mode of administration, the particular effects of particular chemical compounds, the proper indications for guidance in prescribing, and the reasonably exact therapeutic results to be expected. Dr. Bell, of Philadelphia, has admirably handled the large portion of the subjects in his manual, but there are still a large number of lacunæ to fill.

There remains to consider the medicinal value of mineral waters internally administered, and the indications for their employment.

There are three principal *modes of administration*; the *great cure*, as the Germans call it, in vogue at almost all springs, where the patients are saturated with the water as quickly as possible; the whole process occupying from three to four weeks. It may be likened somewhat to pushing the use of mercury to salivation. By this proceeding severe crises are produced, chronic ailments are developed into acute, and masked diseases assume their normal guise. This exaggerated method was doubtless fostered into extended use by the concurrent efforts of both patient and physician to reduce the time devoted to the process to a minimum, the former anxious to return home, the latter to make the most of the period allowed him; also, by the anxiety natural to both parties to hasten on the critical change from which so much was expected. A marked change for the better in this respect, has been observed of later years at the more important European springs.

In the *little cure* a minimum quantity is taken daily, it may be for years. The most powerful alterative effects are thus produced; no crises are expected as a matter of course, although they do occur in a less violent form; but the most obstinate chronic functional disorders may thus be conquered. The *middle cure* is a medium between the two; the patient taking from one to two pints a day for perhaps three or four months. Where it is important to produce a radical change as soon as possible, without any absolute necessity for an entire abandonment of all business cares, as is the case in the great cure, this is the best method in all three. The doses should always be such, and administered at such intervals that the stomach does not feel overfilled, nor the water pass off too rapidly by skin, kidneys, or bowels.

As in the morning the body is rested and re-invigorated, the mind tranquil, the stomach empty, and the quantity of fluid in the system] diminished, mineral waters taken at an early hour are more easily tolerated and absorbed; the next best time is before the last meal of the day, when that is not too heavy. Some chalybeates may with great advantage be taken in small quantities, with or immediately after meals; alkaline waters, as Vichy, Bilin, Marienbad, Kreuz, at intervals through the day like any other medicine.

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* Des principales Eaux Minerales de l'Europe.

In proportion as the quantity of mineral water taken is large, does the necessity for strict diet increase. The ingestion of large quantities of a mineral water seems to lower the powers of digestion, so that articles of food not usually disagreeing, become almost poisonous. Thus, while under a regular course, a glass of cold milk is apt to produce violent disturbance, and experience has settled down upon a dietary which I may condense into these words—"be strictly temperate in every indulgence of appetite, and avoid all sour, fat, heavy, bilious, and indigestible articles of food."

It is a great mistake to suppose that summer is the only proper time for the free use of mineral waters. It is the most *convenient* time, and when large quantities of such waters as render the patient unusually sensitive to cold are to be employed, it may be considered the advisable time; but the good effects of a course are often seriously interfered with by the exhaustive influence of the summer heat, and the excessive diaphoresis induced. June and September are good months in general; though the middle as well as the little cure may be commenced at any season. They are beginning to keep many of the Spas in Continental Europe open to invalids all the year round. It is self-evident that if a given medicine (mineral water) is considered necessary to the treatment of a given cure, the danger incurred by deferring its use must be far greater than that likely to arise from the concurrent influences of unfavorable season or climate, such as cold and damp, against which obvious precautions may be taken, so as to nullify their deleterious effects. While the precaution grows less imperative as the quantity of water to be taken is less, the rule is to commence a regular course when the system is most tranquil, and the symptoms of the disease are least apparent. Thus in skin diseases you choose the times of absence or least activity; in gout, rheumatism, or neuralgia, the period of apparent freedom from morbid action; and the intervals of least exacerbation in catarrh or asthma. On the other hand, I meet with new evidence every day of the value of mineral waters taken in smaller doses during the severest paroxysms of some of these diseases; and have frequently seen an acute gonorrhœa cured in a few days by a free use of Marienbad Kreuz, or a fresh cold relieved at once by two or three beakers of Carlsbad.

CASE OF
PSEUDARTHROSIS OF THE TIBIA IN A MEDICAL MAN.

CURED BY THE USE OF SILVER LIGATURES.

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Case.—J. W. R., a medical man, æt. twenty-seven, was admitted into the Pacific Clinical Infirmary, January, 1859, in consequence of ununited comminuted fracture of the tibia of four months' standing. The fibula had also been fractured. The mobility of the fractured bone had been so considerable that a pseudarthrosis was formed, as ascertained after opening the soft parts down to it.

Operation.—An incision was made along the spine of the tibia, five inches in length, at once down to the bone. A transverse one was next made over the place of fracture an inch and a half long. The soft parts were then removed with a chisel, so as to expose the pseudarthrosis fully. Several detached fragments of bone were found, of white color, very solid and with sharp edges, such as would characterize those of a newly-broken bone in a healthy condition. One piece of bone, however, was found in a different state. A portion of periosteum was adherent to it, which had sustained its vitality and caused it to undergo a great change; so much so that its softness and porosity made it resemble very closely the cancellated structure found in the articular extremities constituting a joint. Its edges had been rounded off apparently by friction, until it presented surfaces almost smooth, and shining as those constituting the diarthrodial joints generally. It had adherent to it a delicate floating kind of substance very like synovial membrane. In fact, nature having mistaken the design of the surgeons in attendance, had prepared the parts for a degree of motion characteristic of diarthrodial connexions. This was all carefully dissected away and the detached pieces of bone removed, after which it was found that there were projecting portions from both the lower and upper extremities suited to each other, and which when brought together were well adapted to the use of the silver ligatures, which were accordingly applied. The ends of the bone were drilled in two places with a drill one line in diameter, and ligatures of silver a little smaller introduced, the ends of each of which were twisted together so as to make a firm knot. I should have stated that before using the drill care was taken to remove the adventitious formation found upon the ends of the fragments, until two perfect bony surfaces were presented. This I regarded at the time as a *sine quâ non* to success in all such operations, but at present do not regard it so. I often cut down upon the bones in these cases and apply the ligatures without paying any particular attention to the intervening soft parts. The change of action in these structures consequent upon the operation is such as to induce them to gradually harden and finally to become bone. But, where it is entirely convenient, I think it a good plan to remove all the soft parts attached to the ends of bone constituting a pseudarthrosis.

The wires having been adjusted the wound was dressed by placing a piece of lint in it, wet with an evaporating lotion, composed of one part of alcohol and ten of water, and a roller wet with the same around the limb as tightly as the patient could conveniently bear, commencing at the toes and continuing to above the knee. Splints were then applied to keep the parts steady when the dressing was concluded.

Subsequent Treatment.—The evaporating lotion was applied for the first ten days, after which the limb was put into an encasement of plaster of Paris, applied in the following manner. The gypsum being made into a paste by admixture with water it was applied in a coating two inches thick around the whole limb including the foot—a space being left simply through which to examine and dress the wound at the place of operation. Poultices were applied at the end of ten days, and continued for ten weeks, being changed twice a day during this time. The ends of the wires were moved back and forth during this time every third day for the purpose of rendering their removal easy. A piece of lint was kept in the wound so as to prevent its healing too readily, until it was ascertained that all tendency to exfoliation of bone had ceased, and that a bony union was taking place. A few small pieces of bone were thrown off by the process of exfoliation, and discharged through the opening kept as described.

The wound being finally permitted to fill up from the bottom, the granulations were soon even with the surrounding skin, and the cure progressed slowly but surely for about seven months, when the patient could walk very well, though it was some time after that before he could consider himself as entirely restored. The leg is over half an inch shorter than its fellow, but that is barely sufficient to cause perceptible lameness.

The cure was slower in this case than in most others of the kind I have treated. When the ligatures were removed, over three months after the operation, the leg would bend very readily at the place of fracture, the union of the bone being through the medium of fibro-cartilage, having a small amount of ossific matter in it, which slowly hardened until it turned to solid bone. The wires were removed in the following manner. The knots being untwisted, one end of each was cut off with a pair of narrow-bladed bone scissors, passed down by the side near to the bone. This being done, the other extremity was drawn upon and readily removed. The plaster of Paris was then taken off, and light tin splints applied instead, for the purpose of protecting the limb from injury.

Remark.—I do not use the plaster of Paris as described, at present. A light, protective encasement, made of tin, I find will answer equally well in view of effecting a bony union, while it is much better in other respects. It permits the patient not only to sit up out of bed in a few days, but also enables him to get about on crutches in a short time. And, in cases of burrowing of purulent matter, it enables the surgeon to apply pressure in the proper places to prevent its extending.

MERCURIO-SYPHILITIC CARIES OF THE LOWER JAW.

SUCCESSFUL OPERATION.

By J. HARRY THOMPSON, M.D.,

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OPERATIONS upon the lower jaw have of late years become so general, that unless some point of interest presents itself in the course of treatment, but little offers to repay a report. The following case, which has been under my charge since February, 1860—latterly for observation only, has been one to me of unusual interest. First, on account of the emaciated condition of the patient when first presenting herself for treatment, which was so extreme as almost to forbid all hope of successful interference. Second, from the unusually rapid improvement after the operation. Third, from the almost entire absence of deformity at the present time. The following is the history of the case.

Mrs. T——, aged 27 years, native of America. I first saw her in February, 1860; her general appearance was that of a patient in the last stage of phthisis, extremely emaciated—hectic and exsanguinated. The lower jaw was enlarged from angle to angle, teeth carious and loose, and her breath excessively offensive. On pressing the gums, pus flowed freely into the mouth and through a fistulous opening under the chin; a probe passed into this opening came out in the mouth by the side of the lower central incisor. She complained of constant pain in the entire jaw, which was so extreme as to prevent sleep, except under the influence of large doses of laudanum; her stomach rejected food as soon as taken; she had had for some months a persistent diarrhœa; ankles and feet œdematous; pulse 120, feeble and intermittent.

Her history as given by herself is as follows:—She was married at the age of seventeen; shortly after became pregnant and aborted on the third month of her pregnancy: from this she recovered, to again become pregnant, and when advanced to about the same period two more pregnancies and abortions followed, but her health did not suffer much from them. After her last abortion, she contracted primary syphilis from her husband, and for this was salivated. She had several attacks of the same disease at different times afterwards, and upon each occasion was subjected to the action of mercury—the last occurring some two years previous to the time I saw her. From this she never recovered; her strength rapidly failed. She had constant pain in the face and jaw, her teeth became loose, and she was unable to masticate her food. This state of things had been gradually getting worse until the time I saw her: for the two months previous she had been under constitutional treatment with cod-liver oil and quinia, but she thought she had derived no benefit from it.

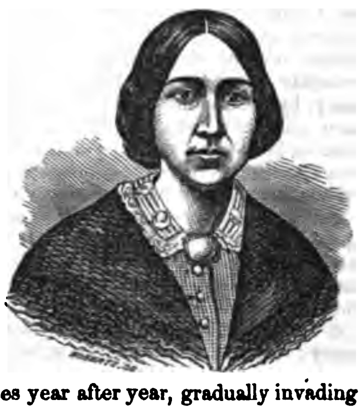
Being satisfied that it was a case of mercurio-syphilitic caries of the lower jaw, and having but little hope of any improvement in her general health whilst so large an amount of local irritation existed, I advised the immediate removal of so much of the bone as was diseased. To this she readily assented.

March 6, 1860.—Assisted by Dr. Markoe, I removed the diseased portion of the bone which extended from, and included, the first molar on the right to the second molar tooth on the left side, and to within about one-third of an inch of the inferior border of the bone. The patient having been brought fully under the influence of ether, I commenced my incision about half an inch in front of the angle on the right, and continued it to the same point on the left side, keeping on the inferior portion of the lower border of the bone. I avoided the facial-artery on the right, but divided it on the left side; this was readily secured by ligature, none of its branches gave any trouble during the operation after dissecting up the flap and turning it over the face; the bone was completely exposed, and plenty of room given for operating. The diseased portion of bone was removed by the chisel and gouge, and a small portion of sound bone taken with it on either side for better security; at the inferior border the sound part was so narrow, being about one-third of an inch in thickness only, that it offered no margin for encroachment. The soft parts were carefully brought together and kept in apposition by the interrupted suture; the patient was removed to her bed. Cold water dressings were applied, and she was left to recover from the effects of the ether.

I saw her again the same evening; she complained of no pain, but was very low, pulse 124 and scarcely to be felt at the wrist; gave two ounces brandy and opii gr. j., and ordered this repeated every four hours. She passed a good night, and next day at noon was considerably improved —pulse 110, and stronger. Some swelling of the face, but very little pain; continued the same treatment. On the fourth day, I removed the sutures, the whole extent of the wound having united by first intention; the mouth had been constantly cleansed from the commencement, with a weak solution of the chloride of soda: this was continued. She was now able to take some nourishment, and had a little appetite. Therefore, discontinued the brandy and opium, and ordered beef-soup, wine, and such nourishment as could be taken without being masticated. Each day she gained strength, and on the tenth day after the operation went out for an airing, and walked some three or four blocks.

March 20.—Patient quite free from pain. Sleeps well; appetite good; pulse 84, and moderately full. Gave tinct. cinch. co. ʒ xxxss; potass. iodidi ʒ iss. *Dose*—Teaspoonful three times a day, with 1 grain ferri iodidi. This treatment was continued for three months, at the end of which time my patient was in good health, enjoying a fair amount of strength, and had gained considerable flesh. During this time several small pieces of bone were removed from the mouth, which had exfoliated from the lower border.

In the latter part of November, the parts being quite healed and sufficiently hardened, a temporary set of artificial gums and teeth were made, which were fastened by clasps to the two remaining teeth—giving to the mouth and chin a natural appearance, and removing all deformity.



The accompanying sketch was taken from a Photograph for which she sat a few days after the teeth were inserted, and is a fair representation of her appearance at the present time.

There is one peculiar feature connected with this form of disease. "The bone never recovers itself by exfoliation or reproduction; but unassisted the disease continues year after year, gradually invading the adjacent sound bone, undermining the constitution, and there being no natural limit to the duration of the disease, it terminates only with the life of the patient, who, after years of suffering, becomes finally exhausted, either by the caries itself or some other disease which the irritation produced by the caries, has excited.

To what extent the syphilitic poison assists in the production of this miserable condition, is a question. Delpech believed the diseased changes which syphilis produces in bones to be necrosis—not caries. Mayo and Meischer both recognise a caries of the bones essentially syphilitic in its character. Rust in his lectures, advances the opinion that caries and necrosis are one and the same, caries, being a necrosis in particles occurring in constitutions enfeebled either by syphilis, mercury, or scrofula. Syme and Lawrence believe that caries of the bone occurring in a patient who has been afflicted with syphilis, and for which disease he has been salivated, is caused by the syphilitic poison modified in its action by the mercury; and in this opinion I believe most surgeons of the present time agree.

OVARIOTOMY

SUCCESSFULLY PERFORMED ON A LADY, SEVENTY-FIVE YEARS OLD.

BY

E. P. BENNETT, M.D., AND WM. C. BENNETT, M.D.,

OF DANBURY, CONN.

About two weeks since I was consulted by a lady of a neighboring town for an enlargement of the abdomen, which on examination proved to be an ovarian cyst. Although seventy-five years old, she was in the enjoyment of good health, active and intelligent. I could not find upon a close examination any other disease, except a little valvular disease of the heart, common at this period of life, probably from ossific deposits in the valves. I was well satisfied that it was not adherent, and that it was multilocular. I explained to her, as clearly as possible, the nature of the case, and her chances of success from an operation, and she readily consented to have it done. Accordingly on the 17th of the present month, with the assistance of my son, Dr. Wm. C. Bennett, I proceeded to remove it, as I anticipated the tumor was not adherent, but eminently multilocular. I made, as I usually do, a small incision not over two inches in length, and exposed the sac, which I punctured with a trocar, and discharged its contents. I then passed a strong thread through this portion of the sac, drew it out until another cyst presented itself, which I also proceeded to puncture, and so continued, until I emptied seven or eight sacs of considerable size, when I succeeded in drawing it all out, tied it with a double ligature, and cut it off. I closed the wound with the silver suture, and dressed in the usual manner. She has recovered without any mishap, and is now able to walk about, enjoys her food, and is in all respects comfortable and happy. The fatal error, in my opinion, in regard to this operation, consists in surgeons still continuing to make large incisions through the peritoneum, and handling too roughly the abdominal viscera. This is entirely unnecessary, by proceeding in the manner above stated; if there are adhesions you will find them, and generally they can be broken up with the finger, so that the large openings are entirely unnecessary and extremely hurtful, and when abandoned I feel quite confident that ovariotomy will come to be a successful operation, and the prejudices of the profession against it will cease. It has been recommended in this operation to do away with ligatures entirely, and use the ecraseur, but I would not be willing to trust it. I do not look upon this new instrument with much favor, any way; on the whole, I would call it a decided retrograde in surgery; where I would not go with my knife, I would not, as a general rule, go at all. Although this lady had decided symptoms of organic changes in the heart, she took chloroform with impunity. I presume she is the oldest person on record upon whom the operation has been performed.

ON THE NEW ANÆSTHETIC KEROSOLENE.

By EPHRAIM CUTTER, M.D.,

OF WOBURN, MASS.

READ BEFORE THE MIDDLESEX EAST. DISTRICT MEDICAL SOCIETY, JULY 17TH, 1861.

This new anæsthetic, kerosolene, is obtained as a product, which hitherto has been thrown away as useless, in the manufacture of kerosene oil by the destructive distillation of coal, not coal oil nor tar. If I understand it aright, the crude volatile matters that come over from the still at a temperature of 150° Fahrenheit are condensed and treated with sulphuric acid, and then redistilled. The result is the article you see before you. It may be largely produced. I am informed that from forty to sixty thousand gallons could be annually made by one establishment alone in Boston from the waste of the usual course of manufacture for that period. It could be furnished at a dollar a gallon.

The chemistry of the article has not been described. It has been named by the discoverers kerosolene or keroform, possibly under the impression that it may be a new organic radical or a compound of a new organic radical. Whether this has been definitely determined by analysis is not known. From its mode of production, specific gravity, physical and physiological properties, one would fain class it as an ether or an analogous hydrocarbon. Kerosolene is a beautiful colorless and volatile liquid, with a specific gravity of 634 (roughly determined). Ether has a specific gravity of about 750, chloroform 1.49. Tested with litmus paper it was found neutral. As regards the appearance to the sight, it cannot be distinguished from ether. The odor is not peculiar and hardly perceptible, and what is perceptible is very pleasant, resembling that of chloroform. It leaves no persistent smell in the apartment where it is evaporated. In this respect it is very much superior to ether, and is not so sickish as chloroform. It is tasteless. It evaporates wholly on exposure. A given quantity of ether and kerosolene was evaporated in capsules floating in water at a temperature of 108° Fahr. The ether disappeared first.

It is highly inflammable. Besides the odor just mentioned, there is a faint smell, like kerosene oil. It seems as if the specimen examined was not chemically pure, but contaminated with a small quantity of the kerosene oil. (The different samples seen have varied some in regard to this kerosene odor. The second sample contained much more than the first, and occasioned a slight headache upon inhalation, which a third did not, having very much less of the kerosene odor.) This suspicion is confirmed by agitating the kerosolene with twice its bulk of water. The phenomena witnessed are the same as are seen when ether is similarly treated, only that the kerosolene forms larger and more persistent balls, and the water is much more and longer turbid. A portion allowed to stand twelve hours after agitation with the water, presented a distinct layer of oily matter, between the upper surface of the water and the lower surface of the kerosolene. Ether furnished a similar one, but not so distinct and voluminous.

The vapor applied to the skin, as is sometimes done with chloroform, in neuralgia, is irritating, but not to the same degree as that of the latter. The first intimation that this substance had anæsthetic properties was declared by the fact that an Irishman, sent in to clean out a still, became totally insensible. Upon being withdrawn, and recovering his faculties, he expressed himself as having had a very fine "drahme." The article was thus suspected: a quantity of it was procured, and given to mice and flies. One mouse was killed by it. Mr. W. B. Merrill, an attaché of the works (Downer Kerosene Oil Co., Boston,) then introduced it to the notice of Dr. H. J. Bowditch, who in turn called the attention of the Boston Society of Medical Improvement to it. This body appointed a commission to examine into its claims. In prosecuting their inquiries, Dr. H. J. Biglow was probably the first to try it upon the human subject, and that subject was himself. He also exhibited it to some patients. An account of his experiments was published in the *Boston Medical and Surgical Journal* of last week.

The writer has experimented upon himself and others. In my own case, it was given to me by my friend and student, Mr. S. W. Abbott. I remained under its influence full half an hour twice. Perhaps four ounces of the kerosolene were consumed in each trial. The first impression is sudden, powerful, and pleasant. Almost immediately I passed into a state of pleasurable insensibility, which at no time was perfect. At least there would be responses to the pricks of a pin, and the muscles were not quiet—although afterwards, I had no recollection of any such thing. The pulse and respiration were not much altered from their normal rate, the face was rather pale. At the first trial Mr. Abbott states, that I travelled about and grasped the napkin on which the kerosolene was found, with my teeth, so strongly that he could hardly get it away. The stimulus of the vapor penetrated the whole frame, even to the tips of the fingers. No unpleasant effects have been experienced from the two experimentations, except a slight headache, which I think may be due to the presence of the adventitious kerosolene.

As you breathe the vapor, you seem to float away into a wavy maze, with a sense of complete loneliness. There appears to be but one object in the universe, and that object is yourself. On recovery the first thing seen is deemed the next only existence in the universe. It takes some little time to regain all the faculties.*

At the meeting at which the above was read, quantities of the kerosolene were distributed, and several of the gentlemen of the society inhaled it in the presence of the assembled company. They came under its influence immediately, and also recovered from it well. Dr. Ingalls reported two trials of its external use in cases of neuralgia, in one of which it succeeded. The mode of procedure is to moisten a pledget of cotton-wool with the kerosolene, lay it upon the skin, and cover it with a watch crystal.

From the above trials, it is proper to infer that kerosolene is a very fit article for further experiment. It must be presumed to be almost safe, as in all the trials of it upon man and the lower animals, only a mouse has been killed. Its price, odor, and instantaneousness of action are advantages over ether. Mr. W. B. Merril Downer, Kerosene Oil Co., No. 76 Water Street, Boston, will be pleased gratuitously to supply medical men with specimens for physiological trials.

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IMPORTATION OF CURRANTS INTO THE UNITED STATES.—About twenty-two years ago currants began to be imported into the United States, and the cheap prices prevailing for a long time made this fruit to be within the reach of all classes, and between 3,000,000 to 4,000,000 lbs. were annually consumed, the price being about four and a half to five cents per pound; but since the year 1851, when the sickness of the vines prevailed, the prices were pushed up from five to twenty-five cents per pound, and the importation into this country was almost stopped, so that in the year 1854 we find that the importations amounted only to 219,118 pounds, which were sold at an average price of twenty cents per pound.—*Merchants' Magazine.*

American Medical Times.

SATURDAY, AUGUST 10, 1861.

THE SANITARY COMMISSION.

> "We have more information on the sanitary history of the Crimean campaign than we have on any other. It is a complete example—history does not afford its equal—of an army, after great disaster, arising from neglects, having been brought into the highest state of health and efficiency. It is the whole experiment on a colossal scale. In all other examples, the last step has been wanting to complete the solution of the problem.
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> "We had in the first seven months of the Crimean campaign a mortality among the troops at the rate of 60 per cent. per annum from diseases alone—a rate of mortality which exceeds that of the great plague in the population of London, and a higher ratio than the mortality of cholera to the attacks; that is to say, that there died out of the army in the Crimea, an annual ratio greater than ordinarily die in times of pestilence out of sick.
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> "We had, during the last six months of the war, a mortality among our *sick* not much more than that among our *healthy* guards at home, and a mortality among our troops, in the last five months, two-thirds only of what it is among our troops at home."—*Extracts from* MISS NIGHTINGALE'S *Evidence before the "Commissioners appointed to inquire into the Regulations affecting the Sanitary Condition of the Army, the Organisation of Military Hospitals, &c., &c.* London, 1858."

IN our editorial of last week upon the Profession and the Crisis, we designated the Sanitary Commission as one of the agents of the profession in carrying out its great function of life conservator. The object of the Commission is, by urging the introduction of sanitary discipline, and compulsory obedience to the laws of health, into every department of the army, to prevent the existence and extension of those causes of disease and death which await but the slightest relaxation of vigilance to spring into active and most destructive operation. It proposes also, by provident anticipation and timely supply, to furnish all the means necessary for the relief and mitigation of the inevitable suffering and accidents which warfare entails, and by the application of hygienic science to cooking, clothing, food, and mode of life, to raise the standard of strength, efficiency, and endurance to their highest attainable perfection.

The Commission owes its origin to the profession, and must draw its life and powers from the same source. We have not waited till our troops were decimated by cholera and typhus to appoint a tardy Commission, but the moment the necessity arose, and our fellow-citizens offered their bodies to fill the breach and stop the political crevasse, the Profession, moved by a common sentiment of justice, charity, humanity, and true political and social economy, bestirred itself to provide against the causes of suffering and waste of life which it foresaw to be inevitable, and which it knew could only be held in check, and partially remedied, by sanitary prophylaxis. We have not waited till the mortality of our army had reached the frightful figure of 60 per cent. of our total strength—a mortality exceeding that of the plague of London of 1665, with its hygienic lesson of 1666 (a lesson which would appear until recently wholly lost to sanitary science).

But, taking warning by Walcheren and Jamaica, Barbadoes and the coast of Africa, Mexico and India, and more recently and effectually, because scientifically analysed and recorded, the Crimea—we have provided the means of meeting the evil, and have, to a measurable extent, anticipated it. Many valuable lives have been lost, which could have been saved by ordinary prudence and vigilance on the part of company and regimental officers. Gross frauds have been perpetrated in the departments of clothing and provisions; and many regiments have left their depots without adequate or well arranged supplies of medicines, stores, instruments, and dressings. Great quantities of supplies have been useless because unattainable when required, for want of system and order in packing and arrangement. Many dissipated, incompetent, and ignorant men (not even in some cases physicians), have gone in the capacity of medical officers. Gross injustice to the public service, and outrageous tyranny, fraud, and cruelty towards individuals, have been practised unchecked and uncondemned in the department of medical inspection. The causes enumerated, with many others, which it is not our province to discuss, produced some of their legitimate results in the recent deplorable and sickening disaster; but, as yet, no widespread epidemic or devastating pestilence has swept over our armies or withered our energies. In this city, and in the hospitals at Washington and Georgetown, the sick and wounded under MEDICAL DIRECTOR AGNEW here, and the Medical Staff of the regular Army there, have received all the care, attention, and medical justice which scientific skill, refined benevolence, Christian charity, and tireless labor could bestow. The acquisition of such men as HAMMOND and GOULEY to the regular staff, and HAMILTON to the volunteer army, not to mention many other accomplished and meritorious men, gives encouragement in the present disheartening circumstances and hope for the future.

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* Since the above was written, I have taken the article again. The insensibility to surrounding impressions was complete, although the eyes were not closed. Pinches, and the pricks of a pin were unnoticed. There was no subsequent headache. The article used was the third specimen. The effects lasted some time. About an ounce was consumed.

My brother in-law, who once took ether in considerable amount without producing anæsthesia, on inhaling the kerosolene immediately succumbed to its influence. It occasioned some sweating in him.

We are only at the beginning of what threatens to be a long, obstinate, deadly, and exhausting struggle. The price of sanitary success, as well as of every other, is incessant vigilance and unlimited self-sacrifice. War has its prosaic and commonplace side, as well as its romantic and poetic. Broadway ovations are the foam on the beach of a storm-tossed ocean. The true hero is stimulated, not made drunk by the wine of applause, and does not taste it in advance, but waits till he has achieved success, or demonstrated his right to it, before he lifts the sparkling beaker to his lips. We unfortunately got drunk by anticipation, and have received our first sobering lesson.

The Sanitary Commission is pursuing a different plan; and the experience we have already had will lead the profession and the public to give it a still more cordial support, and endow it with still greater powers. The records of the British Sanitary Commission, and the reforms by them instituted, which owed their existence and vitality to the plastic female element, embodied in the person of Florence Nightingale, the Saint of sanitary science, with the remarkable and tangible result of reducing the mortality from sixty per cent. to less than that of the Guards in London, by the application of the laws of sanitary science and sound common sense, prove beyond the shadow of question, that we may enjoy a similar benefit without the preceding experience of an ignominious and murderous mortality.

The greatest sacrifice made by an American soldier is that of his individual will and personal liberty. Liberty and individuality are dearer to an American than life, and he gives the highest possible proof of patriotism and inviolable fidelity to the Constitution, the glorious fabric of his fathers, by resigning what he holds so dear to become an almost unrecognised atom in the warlike element evoked for their defence and perpetuation. Having done this, he becomes in the highest sense the child of the State. He is the son of every old man, the brother of every young man, and the pride of every true-hearted American woman. His life and limbs are the special and sacred care of the medical profession. A rigid account of this trust will be required by public opinion, which is certain and unerring in its final judgment.

We have referred to the Regular Staff of the army in this connexion, and remark in passing that the corps is actuated by a high sense of duty and a noble enthusiasm. Its organization under our limited military establishment, and the unfavorable influence of some of its former chiefs, have been the only barriers to its complete efficiency. We shall return to the subject, and discuss it in full; our present business is with *prevention as a practical science*, and the Sanitary Commission as the effective agent for the successful accomplishment of that object.

The Commission is a voluntary, unpaid (but organized), association of educated, cultivated, and scientific, civil, military, and medical gentlemen, and rests for its basis upon the unwritten law of justice, charity, humanity, and public welfare, upon which the profession itself reposes as the *conservator of life*. Its appropriations, if it receives any, will be only sufficient for its working expenses, and for the salaries and travelling expenses of its active agents. Its resources must come from the people. The people recognise and acknowledge the soldier as their child, and they have the disposition and the means to furnish an abundant supply of every article of necessity, comfort, and useful luxury. It is the wish and intention of every family that the sick and wounded soldiers shall be cared for, precisely as they would wish their own members treated, in sickness or accidental injury. Their sympathy, tenderness, and generosity are boundless; it is only necessary to present the subject and indicate the proper channel.

The Sanitary Commission is the channel through which this generous and affectionate (and after all only just) national intention can obtain realization and practical application, swiftly, effectually, and economically, so that with the least expenditure of material and money the greatest amount of sickness can be prevented or cured, limbs saved, and personal and social happiness preserved.

The medical profession, as the conservator of life, is bound to present this subject clearly and distinctly to the public mind. Every physician should urge it on his community and upon every individual (*who is capable of appreciating it*) with whom he comes in contact in his daily practice. He can by this means render as efficient service to the cause of humanity and his country, as if he were on the battle-field or in a general hospital. He thus assists in forming an intelligent public opinion which will manifest itself first in abundant supplies to be distributed, according to present necessity, and secondarily in new and enlightened state and federal legislation. The reaction upon the profession will be to raise its tone, extend its influence, increase its respectability, and multiply its powers for accomplishing its great object—*life-preserving*.

The character and position of the medical profession of a country is one of the best indices of its civilization and intellectual advancement. Medicine is equal to any of the sciences in its demands upon the intellect, and worthy of the exercise of the highest understanding. It is the most exact of all the sciences excepting metaphysics, and is the most faithful of all, excepting the latter, in its simple, pure, and unflinching fidelity to *truth*. With these high qualities and prerogatives it is, from its nature, eminently social and personal in its practical exercise and application. The true physician is no pedant. He is simple, affable, and modest. His conscious power and knowledge make him gentle; his conscious powerlessness, too, makes him humble. His intimate acquaintance with human infirmity renders him compassionate towards frailty and charitable towards error. These characteristics of the highest order of physicians, and the familiarity of their social relations, have had a tendency, together with faults, vices, and abuses in the very bosom of the profession, to bring it into disrepute with large portions of the public, and have favored the rise and reign of quackery in a thousand different specious and flattering forms, which have to a great extent usurped the functions and obtained the rewards belonging to rational medicine. This has been a subject of just complaint on the part of the honest members of the profession; it has assisted in bringing it into discredit, and in preventing first class educated young men from entering its ranks.

The present opportunity offers itself to the profession to recover all that has been lost in public estimation, and to show wherein lie its real value and efficiency. When people know they are in trouble, *and are not desperate*, they do not resort to quacks, and the nation does not want quackery to interfere with its sick and wounded. If the profession come cordially and earnestly to the support of the Sanitary Commission, and an intelligent public sentiment is created and instructed adequate to provide the proper men, the necessary material, and the requisite authority, the result will be such that, for the future, it will only be necessary to point to it as the triumphant answer to cavils, sneers, reproaches, and slanders.

These ultimate and important considerations sink into comparative insignificance in presence of the tremendous realities which are present, and growing in magnitude day by day. Unless the Commission is heartily sustained, unless thorough-bred physicians and surgeons, who are also high-toned men, are placed in positions of trust, and endowed with substantial rank and plenary powers, the same scenes of devastating pestilence will be witnessed among our troops which were witnessed in the Crimea, and which came near ruining the allied cause; and the same confusion, loss, and neglect of wounded, hopeless abandonment, and wasted courage, which complete the sad and bloody picture of our recent battle.

It may safely be asserted that but for the Sanitary Commission Sebastopol would not have been taken, and the life of the sick old man among the nations prolonged for a little. We may with more certainty, and with all the earnestness of a terrible and threatening truth, assure our countrymen, both lay and medical, that unless our Sanitary Commission is sustained to the degree that shall compel success, our cause will be ruined, and the youngest, fairest, and noblest of the nations will be struck with premature decay and senile decrepitude, or be broken into two or more discordant and hostile factions, and share the fate of all preceding republics. With the facts before us, with the voluminous testimony of the British Sanitary Commissioners, extending from 1855 to 1857, the most remarkable and instructive record in medical literature, it becomes imperative upon every member of the profession to act promptly, vigorously, and unselfishly.

The Sanitary Commission may advertise for what it wants, and get part of it; but these supplies will begin to fall short as soon as the novelty is over, unless the profession take it in hand, and sustain it by organized and untiring effort. In a despotic government such an appeal would be unnecessary. With us it will serve the additional purpose of binding soldiers and people together in common bonds of friendship and mutual regard, and they will not undergo transformation into a foreign mercenary element fit for the purposes of demagogue or despot; they will be none the less good soldiers because remaining an integral part of the people, and will become neither Prætorians nor Janissaries. Let us demonstrate by our spontaneity, intelligence, and generosity, that we are worthy of our free government and glorious constitution, and entitled to success in the struggle we are making to preserve and perpetuate them.

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THE WEEK.

A WRITER in the *British and Foreign Medico-Chirurgical Review*, speaking of the Proceedings of the National Quarantine and Sanitary Convention, says:—

> "The arguments used were chiefly derived from experience obtained at New York, a city decidedly malarious, where the average yearly mortality is one in every twenty-four or twenty-six of the population, and where solitary stray cases of yellow fever are allowed to be of no rare occurrence."

While we are forced to admit that the annual mortality of New York is deplorably great, we cannot allow such a wide departure from the truth, as is here made, to pass uncorrected. New York is not "decidedly malarious;" diseases arising from malaria are never met with except as they are imported, or, perhaps, occasionally along the margins of the rivers. The average mortality is one in thirty-six of the population, a difference from the estimate of the London Reviewer worthy at least of notice. Cases of yellow fever are *never* seen in this city, except in the newly arrived from ports where that disease is prevailing. As our true sanitary condition is a disgrace to the people of this city, which not a few deeply realize, we trust it will not be exaggerated.

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GREAT efforts have been made by the quacks to obtain situations as surgeons in the volunteer army, and in some instances, we regret to say, with success. It is of the utmost importance to the health of the troops that this class of incompetent officers be early discharged from the service. The report of DR. TOMES, of the Sanitary Commission, in another column, shows how the health of a regiment is liable to suffer in the hands of such medical advisers. From another source we learn that a Professor in an Eclectic school is surgeon to a regiment. We hope there will be an inquiry into the qualifications of Surgeons, and that these miserable pretenders will be removed.

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THE prohibition of the sale of ardent spirits to the troops, by a special Act of Congress, is a most important measure, and will not only correct many of the vices of the camp, but will tend powerfully to prevent disease. It is the recorded experience of most intelligent military surgeons, that liquors are the curse of armies, being a fruitful source of crime and disease. DR. MANN, of the war of 1812, bears the most emphatic testimony against them. Already has one Department of the Army, that at Fortress Monroe, suffered the most fearful demoralization from this cause alone. The prohibition has not been made a moment too soon for the safety of our Army.

From the following paragraph, which appeared in an evening paper, we are glad to learn that Dr. Powell, of this city, was not killed in the engagement at Bull Run, as at first reported:

"A letter from W. A. Connelly, dated at Richmond, where he is a prisoner, to his father in this city, states that Dr. A. Powell, surgeon of the Second regiment, New York State Militia, is also a prisoner at Richmond. Dr. Powell was before reported killed, and his numerous friends in this city will be glad to learn of his safety, although a prisoner."

The practice of the "Eclectic System of Medicine" has been legalized by the Canadian Parliament. The periodicals of this class of quacks are jubilant at the result. The *British-American Medical Journal*, notices the Act as follows:

"It may be a question how far any mode of practising medicine should be sustained by a government, and whether it is right to proscribe, under penalties, every mode of practice save one. True it is that every European Government adopts the plan, while some of the American States have repudiated it, and our own country has followed the example of the latter, deprecated and deplored as it has been by the whole medical press of that Union. If there be no value in antiquity, nothing to be learned from the observation and experience of the wisest and the best, who have devoted their lives to the investigation of a particular subject, if the accumulated experience of ages is nothing, then by all means dress every mountebank in a professor's cap and gown, proclaim his teaching good, and his practice that which ought to be adopted by every one. But if the opposite be the case, if guarded by a wise and cautious discrimination, an eclecticism of the truest kind, if guided by every light which science in its most extended application can bring to bear, if such conditions are to be taken into consideration, let them receive their due, their adequate recognition and their prerogative. Where then would we place the mushroom growths of a yesterday, which, like 'Thompsonianism,' alias 'Eclecticism,' take a temporary hold of the lowest orders only of the public mind, then fade away, and in their decay pollute the atmosphere by their corruption. One novelty would usurp the place of another, just as the whim, the caprice, or the device of some cunning rogue might engender. Unlicensed quackery we have never feared, and we question much, if there exists a respectable practitioner who has not been rather benefited than otherwise, by the residence of an unlicensed quack in his vicinity. Such is our experience. Whether it is right or wrong to permit such persons to practise in open violation of law, is a point, the morality of which we do not propose to discuss at present. This, however, is a vastly different thing from a Government permitting the passage of a Bill which actually legalizes the practice of a quackery of the very worst description, and whose advocates are just as unscrupulous as their pretensions are devoid of every attribute except that of unblushing knavery.

The Fiske Fund.—The Trustees of the Fiske Fund are the President and two Vice-Presidents of the R. I. Medical Society; Dr. Caleb Fiske, a former President of that Society, having bequeathed to these officers and their successors, in trust, the sum of two thousand dollars. The use of the income is limited to the purposes of giving premiums, and of printing and distributing among the members of the Society, the successful dissertations. The bequest has increased, by interest and otherwise, so that the Trustees are able to, and usually do, offer two premiums annually of one hundred dollars each. The bequest first became available in the year 1835. Since that time, twenty-six premiums have been awarded; twelve to fellows of the R. I. Medical Society, to whom competition was formerly restricted; six to Massachusetts physicians; six to residents of other states, and one to an English writer.—*Berkshire Med. Journ.*

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

By E. H. JANES, M.D.

On the Saccharine Fermentation in the Milk within the Female Breast.

This is the title of an article in the *Archives of Medicine*, No. VII., by George D. Gibb, M.D., &c. He states that the discovery of vibriones in human milk by Vogel, was first announced in 1853, when he clearly proved that these animalcules were developed within the mammary glands, from the fact of their being seen in the milk on the instant of withdrawal. He believed them to be the result of fermentation in the milk, from congestion and increased heat in these organs, connected with general excitement of the sexual system. Vogel's theory was combated by the observation that were there fermentation, the evolution of lactic acid would immediately destroy the infusoria. In the latter part of 1854, Dr. Gibb was induced to make some researches into this important question, from the circumstance of an infant being brought to him, seven weeks old, extremely emaciated, the mother appearing perfectly healthy. It was a first child, healthy at birth, was ravenous, never satisfied with the large amount of milk it received, had no diarrhœa, but profuse diaphoresis and diuresis had worn it to a shadow. Upon examination, the milk was found to be rich in cream, neutral, sp. gr. 1032, and showed the presence of a large quantity of sugar. Examined under the microscope, it revealed myriads of living animalcules, known as vibrio baculus, but which he changes to the more appropriate name of vibrio lactis. These were, to his mind, the result of fermentation of the saccharine element in the milk, and the fact of their being seen the instant the milk was withdrawn, seemed to prove that the fermentation took place within the gland. There was no mammary congestion, but much sexual excitement, which it became necessary to control by moral and medical treatment.

The child was ordered good cow's milk, and occasionally the mother's milk, and began immediately to improve, becoming fat and hearty in a few weeks, and after a time wholly weaned. The mother's condition also improved; but the milk remained neutral, sp. gr. varying from 1032 to 1035, very rich in sugar, and containing animalcules for some weeks. As the child was gradually weaned, the richness of the milk became less, and being compared with other specimens from time to time, it was found to contain a large amount of sugar, and turned sour much sooner than cow's or healthy human milk. From 1854 up to the present time, he has examined many hundreds of specimens, and found two genera of animalcules, where the general health was disordered during lactation, or where the process of lactation was prolonged or an insufficient quantity secreted. They consist of the true *vibrio lactis* resembling minute hair-shaped bodies, and of monads which were found to be far more frequent, and which he calls *monas lactis*. Their diameter ranges from the 3,000th to the 5,000th part of an inch. They were found at all periods of lactation, the milk varying in color, sp. gr. from 1024 to 1035, and almost invariably neutral or alkaline. The children, as a rule, are badly nourished, emaciated, resembling little old men, and soon die of inanition (unless resort be had to other food), while the mothers appear in good health, milk rich, especially in sugar. He does not think that these little bodies disagree with the child, but suggests that the milk, as it is secreted, receives a galvanic shock through the influence of the uterine nervous system that renders it useless as a nutritive fluid, and it does not undergo the natural changes in the child during the process of assimilation. He regards the act of fermentation within the breast as a fact fully established, and believes that it need not necessarily give rise to lactic acid, as the milk, when examined, is always either neutral or alkaline.

He adds in conclusion, that when an infant is observed to become extremely emaciated, with copious exudations from the skin, intestinal mucous membrane, or renal organs, separately or combined, and if the mother is apparently healthy with a good supply of milk, its examination becomes a matter of urgent necessity, and if it is found to contain any infusoria, it must be gradually dispensed with, and such measures adopted as shall arrest the starvation of the child.

Wall Colors.—C. Fabian reports (*Archiv d. Ph.*), that having examined the urine of two patients, sleeping in rooms the walls of which were covered with paper colored by Schweinfurt green, both were found to contain arsenic, but no copper. The paper being removed, and iodide of potassium prescribed, the arsenic in the urine at first increased in quantity, and finally disappeared. The dust from two rooms hung with arsenical paper, and from two washed with colors containing Schweinfurt green, revealed the presence of arsenic and copper.

Glycerole of Chlorate of Potassa.—Take of chlorate of potassa, 10 grammes, pure glycerine, 100 grammes, mix and dissolve. The mixture possesses very marked disinfectant properties, and good for removing portions of dressing adherent to the sides of wounds.—*M. Martinet, Jour. de Chim. Méd.*

Glycerole of Oil of Mustard.—Take of pure glycerine, 13 drachms, starch, 20 drachms, volatile oil of mustard, 80 drops, mix them. This preparation affords a sinapism always ready for use.—*M. Grimault, Ibid.*

Tar and Copaiba.—M. Ricord has lately combined tar with copaiba in the treatment of gonorrhœa, for the purpose of preventing the unpleasant effects of copaiba. They are said to neutralize each other's noxious tastes. Take 4 lbs. 7 oz. of copaiba, 7 oz. of Norwegian tar, and 5 oz. of calcined magnesia, to make 4,000 capsules. Dose, 15 capsules per diem. He also combines the copaiba with pepsine and bismuth, to prevent the drastic effects of the balsam. Take 5 lbs. 7 oz. copaiba, 1 lb. 3 oz. of neutral pepsine, 4 oz. trisnitrate of bismuth, and 6 oz. of calcined magnesia, to make 6,000 capsules. Dose, from 15 to 18 per diem.—*Med. News.*

Sanitary Commission.

REPORT OF THE RESIDENT SECRETARY,

OF A PRELIMINARY SURVEY OF THE CAMPS OF A PORTION OF THE VOLUNTEER FORCES NEAR WASHINGTON.

(Concluded from page 77.)

For a well-established force with but a small proportion of recruits, and these chiefly accustomed to a poor diet, marching or stationed on a distant frontier, with the advantage of a well-regulated sutler's establishment, a well-managed company fund, and with the guidance and inspection of officers who understand their business, and must attend to it for their own safety's sake, if for no better reason, our army ration is excellent. We have had a rich government, a small army, and an abundance of educated officers, who have patiently studied to effect improvements in its administration. In every line, the regulations show careful observation and reflection, and the most thorough, honorable, and conscientious effort to bring about that which was best for our army, in the average circumstances under which it has been organized, officered, and placed hitherto. The only criticism which can be made against the regulations, general and special, seems to the Secretary to be, that in the effort to guard against fraud and waste, and to impose restrictions and checks upon extravagance, sufficient discretion to vary from the ordinary rules, when desirable, has not been had, and habits of routine and respect for precedent have been too much expected and encouraged. Even this is made with some doubt of there being present occasion for it, and the Secretary is inclined to believe that little is needed to effect all that is practicable, further than to strengthen the hands and give increased confidence to those now having the largest responsibilities in this matter.

Clear, fat, salt pork is the back-bone of the army ration. The authorized quantity of beef is larger than that of pork, but beef is liable to more contingencies of failure than pork. Fat pork of excellent quality, with beans and coffee, seldom fails. And under frontier hardships, in contrast to the ordinary diet of the savage, or even the pioneer settler, these furnish not a bad stand-by, especially for cold weather. Beans boiled five hours with salt pork make a soup or porridge, savory, exceedingly nutritious, and wholesome for most men; add a copious allowance of hot coffee, and men in good health coming in wet, cold, and weary, from a scout or from guard duty, can hardly be supplied with anything better. And it is for men in such circumstances that our military officers, whose soul is in their business, have had to think, first and last. Satisfy those who have been used hardest, upon whose pluck and cheerfulness and strength the most has depended, and there need be little care for the rest. But here, in the midst of summer, we have an army of unacclimated men, drawn chiefly from dense communities, differing among themselves greatly in their habits, but nearly all accustomed to a large variety of food. Fat, salt pork is not proper food for them, and the department has provided the alternative, beef, generally of the most excellent quality, in abundant quantity. If the men have too much salt food here at present, it is the fault of their regimental officers. But as the army moves southward, will it not happen that, owing to accidental causes, one or the other of these articles, beef or salt pork, will fail? If so, then, as far as meat is concerned, the diet must be either exclusively of pork or exclusively of beef. It is worth while to consider whether arrangements cannot be immediately made for a large supply of fresh mutton. Could not, at least, desiccated mutton as well as desiccated beef, and desiccated beef soup, be procured in a short time in large quantities? If so, no time should be lost in establishing this guard against the danger of failure of better provisions.

As to vegetables, there is not probably a single surgeon attached to a volunteer regiment in the vicinity of Washington, who will not testify that the troops are now suffering in health for want of vegetables. And whatever be the character of some of the volunteer surgeons, there are, among them, gentlemen of as high professional reputation as any in the army. Directly or indirectly, the prevailing diarrhœa is, in almost every case, attributed to this cause. A case of scurvy in the troops about Washington is already reported.[*] The volunteer army is generally believed to be in great danger of decimation by scurvy and dysentery. It must be admitted that there is great difficulty in procuring and transporting a large daily supply of green vegetables in good order, and in serving them out systematically for eighty thousand men. It appears to have been not possible, up to this time, to obtain even the necessary local means of transport for this purpose. Are these difficulties to increase as the army is moved into the southern wilderness? In any case this seems really the most important point in which it is possible for the energy and enterprise and capital of the Government to be directed for the protection of the army.

A liberal allowance of fresh potatoes, when these can be procured, and, at all events, of desiccated potatoes, mixed vegetables, and dried fruits, which can be supplied with as much certainty as pork, would add vastly to the cheerfulness of the army, and thus to its strength and health, even if it were not certain to do so more directly. These articles should be issued *by regulation*, and not according to the judgment or caprice of the commanders or quartermasters.

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[*] A number are reported at the West.

It appears to the Secretary that the addition of pepper to the ration is practicable and desirable. The practicability of adding butter is less certain, but it is believed that under most circumstances, for this army, there is no difficulty of consequence in the way of it, except the general difficulty of complicating and increasing the excessive duty of the subsistence department.

Company Fund.—The "company fund" arrangement of the regulars scarcely exists, except where by chance some vigorous old army officer is in charge, and is not to be expected to answer any good purpose during the summer with the volunteers. It is useless, therefore, to point to it as a practicable means of supplying their wants.

Sutlers.—Some of the camps have sutlers; most have not. At one of the sutlers' tents, contrary to the articles of war as well as the army regulations, spirits were furnished the men without restriction. This regiment being composed in large part of Continental Europeans, it was alleged that no harm had resulted, there being but little drunkenness, and but little use of the guard-house. This is also asserted with reference to all the German regiments, at one of which a considerable number of men were found sitting at a long table, under a bower which they had themselves constructed, drinking lager beer, and singing. The convivial recreation thus afforded the men was deemed by the commanding officer and by the surgeon to have a favorable effect on the health of the regiment, in which there was found less diarrhœa that at any other examined. Beer is supplied to all the Germans by sutlers, who dispose of it for a claim on the wages of the men at pay-day, as usual with sutlers. Though much less than in most armies, there is a good deal of drunkenness among the soldiers, who are generally granted leave of absence to visit the town in much too large numbers, for too long a time, and too frequently. It is suggested that the Commission apply to headquarters for an order to prevent leave of absence from camp being granted except to a limited number of any regiment at a time, and only within certain hours of the day. A further act of the military government, to close the dram-shops and bars during the hours allowed for soldiers to be out of their camps, and requiring the police guard of the city to take all soldiers without a pass or not accompanied by an officer to the guard-house, would unquestionably have a most favorable influence on the health of the army of Washington.

For the soldier in camp, a proper enforcement of the army regulations, and a proper use of the discretion allowed the surgeons, will supply the men all the spirits, and all the restrictions upon the use of spirits, which it is best they should have. Whether a moderate quantity of malt liquor might not with advantage be added to the ration is possibly a question worthy of consideration by the Commission. In the few cases where it has been found to be habitually used, the testimony of the regimental surgeons is, so far as it goes, conclusive, as to its wholesome influence. A complaint of excessive thirst is frequently heard. A number of men have stated that they drank six times as much water as they ever did before. "Too much meat," or rather a want of sufficient vegetables, is probably the chief reason of this. "Too much coffee" is another common complaint, meaning, evidently, that too much is expected of coffee, or that, without drinking more coffee than is thought to be wholesome, the appetite at breakfast is not satisfied.

It is a custom to drill the men in most regiments for two hours immediately after the break of day, and before they have had any nourishment. Many suffer much inconvenience from this. Must it not necessarily be harmful in a region at all subject to malarious influences?

Camp Cooking.—Mr. Sanderson's report on camp cooking will be presented to the Commission, and the Secretary refrains from any observations at present on this most important subject. It is enough to say, that in no respect are the volunteers in so much need of instruction, advice, orders, and assistance, as in this. Perhaps the best way of meeting the difficulty would be at once to endeavour to obtain the services of sea-cooks from shipping ports, and attach them, one to a company, throughout the army.

The report of Dr. Harris will leave it unnecessary for the Resident Secretary to place his observations on camp and general hospitals at this time before the Commission. The subject of hospital supplies will need immediate attention, and when it comes up, he has certain measures to propose.

The Secretary must say, in conclusion, that he is compelled to believe that it is now hardly possible to place the volunteer army in a good defensive condition against the pestilential influences by which it must soon be surrounded. No general orders calculated to strengthen the guard against their approach can be immediately enforced with the necessary rigor. The captains, especially, have in general not the faintest comprehension of their proper responsibility; and if they could be made to understand, they could not be made to perform the part which properly belongs to them in any purely military effort to this end. To somewhat mitigate the result is all that the Commission can hope to do. If the Commission and its agents could be at once clothed with some administrative powers, as well as exercise advisory functions, far more could be done than will otherwise be the case. To say, "you had better do so and so," will, nine times out of ten, accomplish nothing; to report a filthy sink, or a lazy captain, or roguish sutler, to headquarters, while grand movements are pending, and efficient leaders are scarce, and the value of their minutes is as the value of years with most men, will accomplish nothing. If it were possible, without interfering with discipline, for the Commission and its agents to have a claim upon the commander of a camp for the means at his disposal for abating a nuisance within it, much could be done. This may be thought too large a power of interference to grant to civilians. But it must not be forgotten that the volunteers are mainly officered by men who a few weeks ago were civilians, and who, in their eagerness to learn "tactics," have hardly yet given any study to other duties. At least there should be the right to require, where the advice of the Commission is disregarded for military reasons, that those reasons should be given in writing by the commanding officer to his military superior.

Looking still to preventive measures, and neglecting in this report the whole question of the treatment of the sick and wounded, the Secretary must ask how is advice to be given so as to be at all effective? Much may be done by the distribution of manuals, by the reiteration of standing orders, and by giving more detailed and elementary instructions than are afforded in the army regulations; but it is believed that the mass of the volunteer officers cannot be reached by such means.

The Resident Secretary, in order to be able to report the condition of the volunteer forces in this vicinity and at Fort Monroe, with more exactness, to the Commission, at this session, has, within a few days, accepted the voluntary services of two competent persons, who have undertaken to visit the camps, and, under his instructions, to examine their condition with all practicable thoroughness. The printed questions of the Commission's Document, No. 8, have furnished the basis of inquiry. Something has been added by the Secretary to these, and each inspector is instructed to exercise his judgment in going further, but is especially enjoined to examine with his own eyes, and by smelling and tasting, whatever requires it. The value of such an investigation, in furnishing information for the Commission to act upon, can best be learned by a perusal of some of the reports made by the inspectors. But the Secretary is inclined to believe that the greatest value will soon consist, if it does not already, in the fact, that while aiding the inspector, the attention of the regimental officers is for the first time gravely and specifically called to the sources of danger which they have allowed to be established in their camps, and which they cannot account for without acknowledging a neglect of their own, and to the information and suggestions for improvement which they will incidentally receive from the inspector. Thus far, the utmost willingness to exhibit the actual condition of their camp has been asserted, and, apparently, in good faith, by all officers called upon. The Secretary is at present of the opinion that more is to be effected in the way of prevention by this agency than by any other means at the immediate command of the Commission. The business of such inspectors, if many should be employed, will need to be carefully systematized; they must be thoroughly instructed, and should be provided with printed advice upon various subjects of camp life and military duty, to be furnished as occasion may offer to officers of different grades, to cooks, and to privates. Thus presenting themselves to make official inquiry only, they will, without special effort or intention, really be the best possible missionaries of sanitary science to the army. If there should be 300,000 men in the field—and it is thought that each regiment should be visited at least once a week, on an average—twenty men of special qualifications for the duty would probably be needed as travelling inspectors. The two last reports of the inspector who has been engaged in this vicinity, together with one from the inspector at Fort Monroe, are laid before the Commission, that the character of this service may be the better understood.

WASHINGTON, *July 9*, 1861.

Correspondence.

DR. W. S. KING, U. S. A., AND THE NEW YORK HERALD.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—It is one of the proofs of possessing distinguished merit to be insulted and abused by the New York Herald. Dr. W. S. King, Surgeon U. S. A., and recently Medical Director of the column under General McDowell, has the honor of being grossly and personally assailed by that unscrupulous sheet in its issue of Friday last.

Dr. King's report to the General commanding furnishes the text for one of the coarsest and most groundless attacks which we recollect to have ever seen even in the Herald. It reminds us of a rabid dog rushing furiously through a crowd of people, and snapping in blind and insane fury right and left. The *virtuous* and *modest* Herald expresses *its* abhorrence of what it chooses to call a heartless document, and of the *vanity*, *puffery*, and *unfeeling verbiage*, with which it says the report abounds, and utters meaningless reproaches because it was not converted into a childish lament over misfortunes and calamities which no medical director could have prevented or remedied.

The Herald is quite beyond its depth when it ventures into the domain of medical science, or attempts to criticise the words and acts of the higher members of the profession, and even the eminent *layman*, whose ancestral traditions might lead him to suppose himself a competent critic, is entirely out and hopelessly at fault.

Dr. King's report is a terse, straightforward, and manly paper. It shows upon its face that the writer did everything in his power to perform his duty and remedy the terrible disasters of that fatal day. That he had not greater success was not his fault, but the misfortune of the system, the defeat, and the culmination of the results of neglect, mismanagement, and political interference, which marked the first introduction to service of the volunteer army.

Dr. King is an accomplished medical gentleman; he is a tried and faithful servant of the U. S. Government, and an excellent surgeon. We know his merit, and we have seen him under circumstances of trial, difficulty, and danger, and can bear witness to his possessing all the qualities which belong to an educated, kind-hearted physician, and a high-toned gentleman. The wanton and outrageous attack of the Herald cannot injure him with the profession or the army, but we are not disposed to allow it to pass unchallenged and unrebuked.

The only thing an honest man and a gentleman in public life has to fear from the Herald is its commendation and approval.

H. S. H.

August 5th, 1861.

HYDROMENINGOCELE.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In your last number Dr. Charles Hasse has published a translation and condensation of an editorial article of the *Journal für Kinderkrankheiten* (Sept. and Oct. 1860), on hydromeningocele. This editorial of the *Journal* is, and is declared to be, in part a translation, in part a condensation of Dr. Gintrac's paper on the same subject, contained in the *Journal de Médecine de Bordeaux* (June, 1860). The paper is so well written, and the subject both so interesting and important, that your readers owe many thanks both to Dr. Hasse and to you for its republication.

Permit me, however, to state, that the literature on the subject appears not to have been fully known to Dr. Gintrac, who distinctly declares the cases collected by him to be the only ones. Drs. Valenta and Wallmann, of Vienna, who have searched the literature of our subject a little more carefully, and are no less scrupulous regarding the differential diagnosis, have exhibited several specimens of hydromeningocele before the Society of Physicians, of Vienna; they have been published in *Zeitschrift der Gesellschaft der Arzte zu Wien*, 1858, No. 14. As they had been published in their own country, the editors of the *Journal für Kinderkrankheiten* would have had the opportunity of referring to them. Drs. V. and W. count twenty instances of hydromeningocele, in the fœtus and in infants, not attended by any alteration of the brain; and eleven others, in which, besides, the brain was abnormous or destroyed, or other malformations were present. They further allude to the occurrence of hydromeningocele in adults; they relate three cases seen by themselves, and refer to two which are on record.

Yours respectfully,

A. JACOBI.

50 AMITY STREET, NEW YORK, *August* 8, 1861.

CINCINNATI COMMERCIAL HOSPITAL.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—THE Commercial Hospital, which has created such a division in the profession of this city, by the monopoly which has been allowed to govern it, is now placed under an administration which is likely to settle all difficulties. For a time it was entirely under the control of the Faculty of the Medical College of Ohio. This has never proved satisfactory to the physicians of the city. The last Legislature took the matter up, and reorganized the Board of Trustees, as follows:—Two were to be appointed by the Superior Court of Cincinnati; two by the Hamilton Common Pleas; one by the Governor of the State; the Mayor of the city, and the Senior member of the Infirmary Directors, being *ex-officio* members—thus, making seven in all. The Board of Trustees has been organized, and at the meeting on the 19th inst., a committee appointed for that purpose reported the rules and regulations for the government of the Hospital. The medical department is organized as follows:—The Staff is composed of 16 members, viz. 6 physicians, 4 surgeons, 2 obstetricians, 2 physicians for female wards, and two oculists. The hospital is divided into eight wards, to each of which one of the medical staff is required to be in daily attendance. The term of service of surgeons and physicians, in each ward, shall be four months; the others, six months. The physicians and surgeons are to give Clinical lectures to the students. Two house-physicians are to be appointed on recommendation of the Medical Board; also, a pathological anatomist, who shall make the autopsies. By a resolution of the Trustees, it is provided, that the members composing the medical staff may be selected from the regular profession of Cincinnati.

This effectually destroys the monopoly, which has hitherto governed the hospital, and gives great satisfaction to the profession. V.

CINCINNATI, *July 30th*, 1861.

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A GRADUATE AFTER EIGHTEEN MONTHS' STUDY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—An article appearing in the *Times* of July 27th, entitled, "A Graduate from a New York Medical College, after two years' Study," has induced me to lay before the profession a case that came within my own observation. A member of the class of 1858–59 with myself, repeatedly informed me that he should have completed only eighteen months of the time required for study when the day for conferring the degrees should arrive, and yet he intended to graduate at that time; and he then received a diploma from one of the oldest and most respectable schools in the city of New York; and if I remember rightly he received an appointment as ship's surgeon, doubtless aided by the undeserved diploma. He was fearful that the Faculty would require of him a certificate from his preceptor that he had studied the requisite time, and on his failing to produce such certificate he would be denied an examination. No such certificate was required of me, as I supposed would be done; nor do I suppose one was asked of him. Agreeing with "Ohio," I believe great injustice is done to the profession, full course students, and to the public, in thus sending forth persons unqualified, as of course they are, to attempt to discharge the high and responsible duties of a physician.

STEUBEN.

WOODHULL, N.Y., *Aug.* 3, 1861.

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FOREIGN CORRESPONDENCE.

[Letter from DAVID P. SMITH, M.D.]

PARIS.

April 9.—To-day I visited the wards of Jobert de Lamballe at Hotel Dieu. He is a very stern, rough man, but withal very attentive to strangers. Although courting no attention I was surprised by his noticing me and directing my attention to several minutiæ. His apparatus for fractured thigh is simply a trough made of wire padded with cotton, reaching from the tuberosity of the ischium to the sole of the foot, in which the limb is laid with but very little if any extension. The limb is almost entirely free from bandaging, and lies in this trough splint entirely free from covering. His practice of cauterising the cervix uteri with red-hot iron for almost every affection, seemingly acting upon the injunction to purge as by fire, is so well known to the profession that it requires no notice here. I saw a very interesting case in his wards of a young woman with an enormous aneurism by anastomosis of one half of the lower lip and side of the cheek, and also of one side of the tongue. For some reason or other this affection had been allowed to remain ever since birth, and it had now caused great deformity of the lower jaw and absorption of the alveolar process.

April 10.—This morning I again went the rounds of La Pitiè with Maisonneuve. I was particularly struck with the simplicity and beauty of the splints of plaster of Paris. I have before stated that they are made by soaking cloth or lint in a thick solution of plaster in water. This cloth is then folded into the form and thickness required, and applied, as one would apply compresses, with a roller bandage. To-day, not more than five minutes after Maisonneuve applied this to a fracture of the radius, I went back to the case with an English surgeon, and in that short interval the plaster had *set*, and every moment seemed to grow perceptibly harder. In my previous practice I have tried diligently to find some material that would form itself perfectly to the limb, and by its couable contact with the whole surface furnish sufficient friction of opposing surfaces to keep even an oblique fracture sufficiently extended and at rest, without any danger of injurious partial pressure. I have succeeded very well with sole leather soaked in warm water, with gutta percha treated in like manner, with felt and gum shellac, and with the starched bandage; but I have felt the want in many cases of something that would be so obliging as to immediately harden after assuming the form of the limb. By waiting ten minutes we can be sure that the splints we have applied are perfectly hard, and just in the shape we want them. I would not by any means use this in all cases, but in regard to the treatment of many cases of fracture I think the inventor of this can exclaim—Eureka. Any time after the splints have hardened the roller bandage can be removed and two or three strips of adhesive plaster used to hold them on. Elastic bands might be used so as to prevent all danger of undue constriction. In future a box of plaster of Paris will form part of my fracture appareil.

Visiting Paris as I did wholly for dissection and practising surgical operations upon the cadaver, I have not thought it worth my while to give any very minute report of the hospital practice. Being employed almost continually in dissection, I did not find time for much hospital attendance in the morning. Every evening, however, I spent from one and a half to two hours in La Charité as a private pupil of M. Dumont, chef de clinique of M. Bouillaud, and profited much thereby. I would strongly recommend such a course to any one visiting Paris, for the immense variety of cases one sees in such a manner, and the facility afforded by careful investigation, cannot fail to benefit.

Army Medical Intelligence.

OFFICIAL REPORT
OF THE
MEDICAL DIRECTOR AT THE BATTLE OF BULL RUN.

ARLINGTON, DEPARTMENT N. E. VIRGINIA,
July 26, 1861.

SIR:—Being chief of the medical staff serving with the army in the Department of Northeastern Virginia, I have the honor to make the following report of so much of the results of the action on the 21st, at Bull Run, as came within my charge. As the officers of the medical staff were attached to different regiments, and on duty with them, I deemed it proper to remain with and accompany the General commanding and staff from the beginning to the termination of the battle, in order that I might be enabled to visit every part of the field where the killed and wounded might be found.

After the action had fairly commenced, and the wounded and the dead were seen lying on the field in every direction, I despatched Assistant Surgeon D. L. Magruder to the rear, with directions to prepare a church, which I had observed as we passed before arriving at the scene of action, for the reception of our wounded, and also to send the ambulances forward as rapidly as possible to pick up the wounded and the dead.

In a very few minutes the ambulances made their appearance, and continued throughout the day to visit every part of the ground which was accessible, in order to be within reach of those parts of the field where the fighting was going on and the wounded were to be found.

It is due to the ambulance drivers to say that they performed their duties efficiently, and the results of their operations also show how absolutely necessary these means of conveyance are to the comfort and relief of the wounded, in giving them shelter and water when ready to perish with heat and thirst.

By means of the ambulance, also, the men who go to the relief of their wounded comrades are separated but a short time from their companies, as, having deposited them in the ambulances, they can then return to their proper positions.

As the General commanding visited almost every part of the ground during the conflict, with a view to encourage or direct the movements of the troops, my position as a member of his staff gave me every opportunity of seeing the result of the action.

I therefore embraced the opportunity thus afforded to give direction, when needed, to the drivers of the ambulances where to find the dead and wounded, and also to those carrying off the wounded where they could find the needed conveyance.

The stretchers were found very useful and comfortable to the wounded, and were in constant requisition in conveying them to the nearest ambulance.

So far as I am informed, the medical staff belonging to the different volunteer regiments discharged their duties satisfactorily. I observed Acting Surgeon Miles busily engaged dressing wounded men under the shade of a tree, in a part of the field where the fire from the enemy was very hot. He addressed me in a brief inquiry as I passed relative to the safety of his father, and then resumed his occupation.

Surgeon C. C. Kerney, of Colonel Hunter's division, and Assistant Surgeon D. L. Magruder, attached to the Commanding General's staff, did good service in the hospital church I have mentioned, and also in two houses near the church, where the wounded were placed after the church had been filled. These officers remained busily engaged in their duties until the enemy's cavalry made its appearance, and but narrowly escaped capture when they left. Drs. Swift and Winston, attached to the New York Eighth, remained with their sick, sacrificing selfish considerations for their own safety in order that their wounded might not be neglected, and are now prisoners.

I am informed that Assistant Surgeons Grey and Steinsburg, of the regular army, and Drs. Honiston and Swan, of the New York Fourteenth, also preferred to remain rather than abandon their charge. The conduct of these officers is worthy of all commendation.

It would be premature in me, in the absence of sufficient data—the reports of the regimental surgeons not yet being received—to express positive opinion as to the number killed and wounded in the action on the 21st. There were, no doubt, many concealed from observation, under cover of the woods and bushes; but judging from the numbers that I saw in various parts of the field, and allowing a wide margin for those unobserved, I should think that the killed and wounded on our side did not exceed from eight hundred to one thousand.

The impossibility of making a careful survey of the field after the battle had ceased, must be my apology for the briefness and want of detail in this report. I may mention before concluding that I met on the field Colonel Heintzelman, United States Army, with a Miniè ball in his arm. I extracted the ball as he sat on his horse, and applied the necessary dressings. I attended to a number of cases on the field, where from hemorrhage and other circumstances immediate attention seemed to be necessary. I am, sir, very respectfully, your obedient servant,

W. S. KING,
Surgeon and Medical Director, U. S. A.
Captain J. B. Fry, Asst. Adjt. Gen., U. S. A.

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FORTRESS MONROE.

STATISTICS OF DISEASES AT THIS POST.

[Special Correspondence of the American Medical Times.]

Through the kindness of Dr. Cuyler, Medical Director at this post, who has permitted me to examine the official reports of the several surgeons of the regiments encamped near here and at Newport News, I am able to give you some statistics relative to their sanitary condition, during the month of June, that may be of interest to your readers.

There were reported at this post on the 1st of July, about 9,887 enlisted men, and 511 officers. Of this number during the month of June 4,218 have been under medical treatment; of these 246 have been sent to the General Hospital; 3,360 have been returned to duty; 71 have been discharged from service; 23 have died, and there were remaining 286 convalescent, and 232 still under treatment.

There were of fevers, 11 cases of congestive; 8 of continued; 48 of intermittent; 20 of remittent; and 10 of typhoid. There were 7 cases of erysipelas; 120 of rubeola; and 5 of varioloid; 74 of cholera morbus; 85 of colic; 152 of constipation; 2,026 of acute diarrhœa; 155 acute dysentery; 15 cases of gastritis; 2 of hæmatemesis; 3 of acute hepatitis; 7 of parotitis; 40 of tonsillitis; 88 of acute bronchitis; 55 of catarrh; 15 of hæmoptysis; 19 of laryngitis; 21 of pneumonic phthisis pulmonalis; 16 of pleuritis; 19 of pneumonia; 137 of acute rheumatism; 19 of chronic rheumatism; 91 of gonorrhœa; 5 of nephritis; 14 of orchitis; 58 syphilis, primary; 23 syphilis, consecutive; 148 of wounds; 25 of contusions; 15 of ophthalmia. The remaining cases were of a miscellaneous character and of but little interest usually. Of those who died, 2 died of phthisis pulmonalis; 1 was drowned; 1 from delirium tremens; 1 from rubeola; 1 from typhoid fever; and 17 from wounds received at Big Bethel, or accidentally in or near camp.

J. W. Hunt,
Surgeon 10th Regt. N. Y. V.
July 30, 1861.

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GENERAL HOSPITAL AT FORTRESS MONROE.

[To the Editor of the American Medical Times.]

Sir:—I notice in your issue of the 27th ult., an allusion to statements of certain newspaper correspondents in regard to the management of the General Hospital at Fortress Monroe.

To reply in detail to the abusive and malicious remarks emanating from irresponsible sources, is ordinarily unwise, and, of course, equally unprofitable and unsatisfactory. In regard, however, to the statements to which reference is made in the paragraph alluded to, I wish simply to state as a matter of justice to all concerned, that from the beginning to the end they present a grossly exaggerated and untruthful representation of facts, got up apparently for no other purpose than to create mischief, and to engender feelings of prejudice against such as are in any way engaged in the volunteer service of our army.

The administration of the hospital, which has been under my charge for the last two months, has, so far as I may conclude from the assurances of those most competent to judge, been highly successful and satisfactory. But until its general direction can be made more secure against the strongly marked prejudice that now prevails at this post against the service of Volunteer Surgeons, it is quite sure that its *direct* management will continue to be extremely uncomfortable, while at the same time the condition of the sick and wounded soldiers will be less humanely regarded, and less promptly provided for.

Gilman Kimball,
Surgeon of the General Hospital.
Fortress Monroe, *Aug.* 3, 1861.

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A Homœopathic Army Surgeon.—Dr. A.S. Tomes, one of the Inspectors appointed by the Sanitary Commission to examine the condition of the camps of the volunteers in the vicinity of Washington, makes the following statement in regard to one regiment: "There is one Surgeon and one Assistant, father and son, who were appointed by the Colonel, and have not been examined by any medical board. The * * * informed me that the former had been a barber in * * * *, and an occasional cupper and leecher, and had no medical degree. The son's medical education was also doubted. Both had evidently failed to obtain the full confidence of the regiment. On examining the file of prescriptions at the hospital, I discovered that they were rudely written, and indicated a treatment, as they consisted chiefly of tartar emetic, ipecacuanha, and epsom salts, hardly favorable to the cure of the prevailing diarrhœa and dysenteries.

While remaining to dine in camp, the regiment returned from the city, whither they had been marched to receive at the arsenal a supply of new muskets. Some time after, a messenger came in declaring that many of the men had been left on the roadside, where they had fallen exhausted with the heat and fatigue. Great excitement ensued in camp, and complaints were uttered against the Colonel for having marched his men during the heat of the day, when the march might have been postponed, as its motive was not pressing, until the evening. The chief surgeon, who had remained in camp, started out to find the men who had been left behind. I followed soon after, and had not proceeded very far on the road when I met him returning to camp with his son, who had accompanied the regiment on its march. The latter, on being introduced to me by his father, said that there was nothing the matter with the men he had left behind him on the road-side but a little fatigue. I expostulated with him upon abandoning his men, and urged him for his own sake to return. He followed my advice, and on reaching the ground we found some forty men lying near the road. All were evidently greatly fatigued, and some half-dozen were suffering from sunstroke. With some whiskey and iced water, with which we had provided ourselves, we soon succeeded in reanimating the sick, and refreshing the rest. The chief surgeon, in the meantime, eame back with a homœopathic medicine box, and began administering homœopathic doses promiscuously to the sick and well. The two surgeons, father and son, are both Germans. The former can hardly understand a word of English, and must have great difficulty in making himself understood to many members of the regiment, one-half of whom are either Irish or Americans. There seems some reason to doubt the competency of the surgeons of this regiment. I confess, however, that there was nothing found in the condition of the men decidedly to prove improper treatment. The number of sick was not large in comparison with that of other regiments. Six had been sent to the hospital at Washington; nine remained in the camp hospital; sixty or seventy were off duty in consequence of various ailments, and there had been no death in camp. The general manner and conversation of the two surgeons were such as to make me distrustful of their intelligence and acquirements. My suspicion of their incompetency, however, is due chiefly to the information of * * * *, who earnestly urged me to report what he stated. He was, however, unwilling that his name should be used, unless he should be guaranteed against all consequences likely to affect his position."

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Surgeons must enlist for the War.—The Boston *Medical Journal* contains the following explanation of the retirement of Dr. Luther Parks from the position of Surgeon to a regiment of Volunteers for three years:

"At the time Major Cobb began to organize his battery of Light Artillery, Dr. Parks accepted an appointment as Surgeon from that gentleman, with the desire and intention of engaging in active service for a few months, relying upon what he considered good authority, that he could resign his commission whenever his convenience should require. He was therefore surprised to find, a short time since, that he was expected to sign a paper contracting with the State of Massachusetts to enter the service of the United States for the term of three years, or until otherwise discharged. Dr. P. at once consulted the United States mustering officer in this vicinity, Lieut. Amory, who gave him the following information, viz. that staff and commissioned officers, as well as privates, were expected to sign the above-mentioned paper; that those signing it were absolved from all obligations imposed by it on receiving a discharge from the Federal Government; that an officer could resign his commission, and his resignation would be accepted, at any time; but that, in time of war, it was not considered creditable for any officer to resign except upon some important and unforeseen emergency. Dr. Parks, therefore, being unable to be absent from home for a longer period than a few months, found himself obliged to retire from his post in a corps in which he had become much interested; and with whose members he had sustained especially pleasant relations."

Medical News.

PERSONAL.

Dr. J. W. Hunt, Surgeon of the 10th Regiment, N. Y. Vol., stationed at Fortress Monroe, having visited New York on leave of absence, to recover from an attack of dysentery, has again returned to duty.——Dr. J. B. Murdock, of Oswego, N. Y., Surgeon to the 24th Regiment (Oswego), N. Y. Volunteers, is now at Arlington Mills, Va.

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American Pharmaceutical Association.—The officers of this association, which was to have met in St. Louis this year, have adjourned until the year following.

Berkshire Medical College.—This institution commenced its Annual Course of Lectures, on Thursday, the 1st of August. The session will continue sixteen weeks.

Increase of Insanity.—The fifteenth report of the Commissioners in Lunacy shows, that during the ten years from the 1st of January, 1849, to the 1st of January, 1859, the number of patients in the various asylums of England and Wales has advanced from 14,500 to 22,853. This increase had been principally in public asylums. In county and borough asylums the advance has been from 6,494 to 15,845, making an increase of 9,351; in lunatic hospitals, from 1,135 to 1,992, making an increase of 857; but as respects licensed houses, the numbers have been reduced from 6,931 to 5,016, making a decrease in these houses of 1,915 patients. The great increase which has taken place in the number of patients in asylums is limited almost entirely to pauper and criminal patients. As respects private patients, the returns show a total increase of 1,072 cases during the ten years—namely, from 3,750 to 4,831. Among the pauper patients the women, in 1859, exceeded the men by 1,680.—*Brit. Med. Journal.*

Ohio State Medical Society.—Although we have no official report of the meeting of the State Medical Society, yet we are gratified to learn that considering the state of the country, and the financial condition of Doctors' pockets these times, it was a most excellent and successful meeting. Quite a number were present; some of the members bringing their families to enjoy the well known hospitalities of mine host of the *White Sulphur Springs*. The sessions continued through Tuesday and Wednesday, the 25th and 26th of June. The officers elect, for the ensuing year, are as follows: For President, Dr. M. B. Wright, of Cincinnati; Vice Presidents, Drs. E. L. Plimpton, N. Dalton, J. Harman, and R. Gundry; Recording Secretaries, Drs. W. W. Dawson and Williams, of Delaware; Treasurer, Dr. J. B. Thompson, of Columbus; and R. Thompson, Librarian. The address of the retiring President, Dr. Conklin, of Sidney, is pronounced unusually fine and appropriate. Several volunteer papers were read by Drs. Pomeraine, Culbertson, Dalton, and Boerstler. These papers are said to be of decided value as scientific contributions, and together with the proceedings will be of enough volume and importance to warrant the usual issue of the annual transactions. We understand invitations were urged for the Society to convene in 1862 in Cleveland, and perhaps one or two other points; but the present delightful location seems so well adapted for all the social and scientific purposes of the Society that it again adjourned to meet, on the third Tuesday in June, 1862, at the Ohio White Sulphur Springs.—*Lancet and Obs.*

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture V.—Part II.

Subjective symptoms of normal dentition: general and local irritation.—Objective symptoms: swelling of the gums, disappearance of the dental cartilage, salivation, etc.—Local diseases attending dentition: odontalgia, gingivitis, odontitis.

That a large number of infants cut their teeth without any bad symptoms, has never been denied. Instead, however, of considering these cases as natural, they have been taken as exceptions; instead of looking for the causes of diseases in the age of the patient, and its various morbid dispositions in its constitution, or in direct injuries, both authors and the public have seemed to rest satisfied in the belief that the more an infant was disturbed with abnormal functions, the nearer came dentition to its natural standard. But all the symptoms observed during or before the protrusion of teeth do not come within the range of morbid affections; I have already spoken of some of the symptoms indicating the approximation of, or attending, the progress of dentition; I therefore shall not dwell upon them, but shall briefly enumerate such as are generally attributed to the protrusion of teeth. I may state that many explanations which would be here required, will naturally follow a physiological sketch of early infantile age, which I intend to give you in a future lecture.

The general irritability of the nervous system in teething children, is said to be increased. They are restless, sleepless, will suddenly awake from a short slumber, are peevish and cross, change their color frequently, and often urinate. I am certainly unwilling to deny the frequent occurrence of these symptoms in teething infants, but will take the liberty of stating, that in early infancy nervous symptoms are of frequent occurrence; that even the weight of the organs of the nervous system is greater in proportion than at any other period of human life, and its action may be supposed to be more powerful, and perhaps irregular; and that the very same symptoms attributed to teething are really being observed in almost all the affections occurring at this age. Both functional disorders and diseases are the more frequent the younger the individual; this is a fact clearly shown by all the statistics of both private and hospital practice, relating to both diseases, and the rate of mortality in this early period of life.

The local irritability produced by the process of dentition has often been noticed, and alluded to as a proof that there is something very peculiar and troublesome about this process. The infant is said to put its fingers into its mouth, and introduce anything it can lay hold on; it bites the nipples, and gentle rubbing of the gums causes an agreeable sensation. It is said to rub its lips, nose, and eyes, and to move the occiput on the pillow, especially at the time of the protrusion of the incisors of the upper jaw.

Such are said to be the local symptoms of either approaching or present dentition; the latter term always being made use of to signify the final protrusion of the teeth. Is it remarkable that an infant will put its fingers into the mouth at this protracted period of teething, viz. from the fifth or sixth to the thirtieth month, when it has done so from birth? The very fact of the peculiar position of the fœtus in the uterus, the prominence of the action of the flexor over the extensor muscles, appear to be among the first causes of the new-born child's sucking its fingers. The great sensibility of the cutaneous nerves of the ends of the fingers, and of the lips, which are moreover regularly exercised by the reception of food; the indistinct impression, in the infant, after having been nursed a number of times, of the lips and mouth being in some connexion with the feeling of satisfaction, are the reasons why the infant sucks its fingers in the few weeks and months following its birth. Whichever explanation is correct, it is a fact that, from the hour of birth the infant will either suck its fingers or keep them in the neighborhood of the mouth and nose. Nor is it astonishing that an infant will, during the time of dentition, take everything to its lips and into its mouth, after it has done so all its life. The principal impressions an infant obtains depends on its relation to foods and drinks; eating is the only real propensity an infant has, and the mouth is known by experience to be the great receptacle destined for the reception of everything around; not to speak again of the lips being used as a means of touching, grasping, and learning the qualities of things. Everything living learns by experience and experiments, by physical impressions. All the sensory organs will be exercised for the purpose of understanding the impressions on the peripheric nerves, and the sensory organ first freely exercised by an infant is that of palpation. Further, a teething child will often bite the nipple, undoubtedly, but a number will not; and any child with any irritation of the cavity of the mouth, with any form of stomatitis, with any disease in fact which causes a sensation of uneasiness, will do the same. And finally, ought we to attribute the restless movements of the occiput on the pillow to teething, when every child affected with almost any affection of the brain, or its membranes, with hyperæmia of the cranial bones, with cutaneous eruptions of the cranial integuments, and rachitical affection of the bones, will be observed to do the same? Why is it that the protrusion of the upper incisors is often attended with this restlessness, and almost regular moving to and fro of the head on the pillow? It means, that irregularity, or anomalies in the protrusion of the upper teeth frequently depend on anomalous development of the upper jaw itself; and that the development of of the upper jaw is generally in intimate connexion with the development of the cranial bones. Thus you perceive, that when this is abnormal, and the upper jaw suffering accordingly in its general development, that often-mentioned symptom has nothing to do with the protrusion of teeth, as such, but must be referred to a defective or abnormal development of the cranial bones and subsequent anomalies in the structure or function of the brain. Instead, therefore, of pointing to dentition, especially to normal dentition, it indicates some more or less grave disturbance in the constitution or function of either the brain or its membranes, or its cranial or cutaneous integuments.

There are some objective symptoms announcing the approaching protrusion of teeth, which are of more or less importance. The gums will swell, and become looser and softer; or, which is more common, the alveolar margin will become thick, hard, flat, and prominent. This condition is always perceptible, and nevertheless we are liable to be mistaken as to its signification. I have seen a child, who had this prominence of the thickened alveolar margin over several teeth for a long time, without the teeth making their appearance. In fact, deep incisions had been made into the gum, more than two months before the first incisor cut through. This shows that although the normal process of dentition generally requires the condition of the alveolar margin described above, we are by no means justified in predicting a speedy protrusion of a tooth through the thickened and elevated wall. This prominence of the so-called dental cartilage is often said to be red, livid, and soft. But in healthy infants, and with normal dentition, the contrary is generally the case. The mucous membrane of the mouth, although normal, is generally of a deeper color than the normal appearance of the gums, and frequently, in catarrhal affections of the mucous membrane of the mouth, the difference between its livid and softened velvet-like appearance, and the pale color and solid condition of the gums, is remarkable. Only when the protrusion of a tooth is very imminent, the gum will be in many cases a little sensitive, on being touched or pressed; and saliva and mucus are said to be secreted in a large quantity at the same time, until the gums become thinner and thinner, and the tooth protrudes.

Great importance is attached to salivation by the public, as a premonitory symptom of dentition; but it is a fact, that it will sometimes precede the breaking through of a tooth for a number of months, and will not cease after the tooth, or a group of teeth, have made their appearance. It is thought to be caused by the direct irritation of the gums, acting on the mucous membrane of the mouth, and the stenonian ducts, and the salivary glands. It has even been considered to be the cause of a number of accidents occurring during dentition; the saliva and mucus were, in the opinion of a number of medical writers, swallowed, and proved to be the cause of vomiting and diarrhœa, of erosions and aphthous inflammation of the mucous membrane. The truth is, that increased salivation is regularly observed in infantile age, long before, and during the first period of dentition. If, therefore, those authors were right, who believe it to depend on the irritation of the mucous membrane of the mouth, and of the salivary glands, there must be a constant irritation of the gums in every normal dentition. This, however, is not so, according to my preceding remarks. I will simply state now, that the increased secretion of mucus and saliva before this time does not depend on the protruding teeth, but is the result of the salivary glands and mucous follicles undergoing about this time a rapid process of development. We shall have to return to this subject, and have to learn from a physiological sketch of the infantile organism, which I expect to give in this course of lectures, that a number of symptoms apparently affected by each other, and depending on each other, are but inordinate consequences of one and the same common cause. At all events this will be readily understood by you, that the increased salivation need not be produced by some supposed constant irritation of the gums. At all events, you will not be deceived by the occasional emphatic statement of the following observations, which is meant to show that dentition in normal and robust children will be attended with copious salivation, while sickly and feeble children have no salivation to any amount. This appears to be true, but is not. The observation is imperfect in this, that healthy and robust children of four, six, or eight months, will generally, while awake, be in an upright position, thus dropping a large amount of the secreted mucus and saliva, and being constantly wet with it; while sickly and feeble children of the same age, will, first, be a little backward in their general development, and moreover, have too little muscular power to allow them any but a supine position. Thus they will swallow most of the secretion, which more robust children will be constantly wet with.

I think it but reasonable to infer that if remarkable symptoms are the result of dentition, either normal or abnormal, a large number of anomalies must take place in the immediate neighborhood of the protruding tooth, if not in its own substance. Such affections are found, indeed, and known by the terms of *odontalgia*, *odontitis*, and *gingivitis;* but they are very rare affections, and the only idiopathic ones which are said to have occurred during, or rather in consequence of dentition.

Odontalgia, or neuralgia of the dental pulp, the dental nerve, is said to have been observed in teething children. What were the symptoms of this disease of dentition? Patient cried much, kept his fingers in the mouth, caught the breast greedily, and left off just as suddenly, was also constipated, but otherwise healthy, and there was but little injection, and intumescence of the gums. Exactly the same symptoms are reported to attend normal dentition, with the exception perhaps of constipation. But the restlessness of the infant was in connexion with this constipation, and it screamed from colic pains? Although we are told by observers that the symptoms would disappear with the protrusion of the very first point of a tooth, the number of cases of this dental disease is so small, that we cannot refrain from doubting the correctness of the diagnosis. In olden times, odontalgia from dentition has been observed a number of times; thus Karl Himly has a chapter on the subject; but a more modern author, Hanmann, relates having seen two cases occurring during the protrusion of the molar teeth. Two cases in the lifetime of a medical man, who has met with many thousands of teething children; no pathognomonic symptoms in these very cases to distinguish them from other complaints; no like observations in the practice of hundreds of other practitioners—all this looks rather suspicious, and leads us to infer, that this odontalgia depending on dentition, although its occasional occurrence during the protrusion of a tooth may have been observed, is rather doubtful.

Gingivitis, inflammation of the gums, is also reported to have been observed in the course of dentition. Its symptoms are the very same that have been given as premonitory of normal dentition, and in odontalgia, with the addition of intense injection, swelling, and heat of the gums and the mucous membrane of the mouth and pharynx. We are justified in doubting whether all these cases have been primary gingivitis, or whether or not the affections of the mouth and pharynx have been the primary diseases; the more so when we again are told of the presence of the very same symptoms as above, and moreover learn, that the gums will not only tolerate a moderate pressure while inflamed, but the patient feels relieved. That there can be a severe inflammation of the gums, in connexion with the protrusion of a tooth, is proved by the difficulty sometimes, though rarely, met with by the protruding wisdom tooth, resulting from insufficient room, etc., but very rare it must be, as the termination in suppuration has been observed by but very few men, and but very seldom altogether. We are the more justified in so presuming, as we know of a number of cases of very severe and general stomatitis without the least affection of the gums, and of others where the gums were immensely swelled without injection, heat, or pain; and as the gums are generally very little apt to be affected by inflammatory action. Ulcerations of the cheeks in the immediate neighborhood, or even anomalous protrusion of teeth, either deciduous or permanent, through the gums and alveolar process, in an oblique direction, are but seldom found to give rise to an inflammatory process in the gums.

Odontitis, or inflammation of the tooth, is the third local affection sometimes attributed to dentition. Again the same symptoms, pain, injection, swelling, are enumerated, and described as very intense and obstinate. Recovery would not always take place, although it would be the result, after days or weeks, in the majority of cases; but death would sometimes ensue under the symptoms of a thorough affection of the nervous system, or of a "typhoid fever." It would often be combined with other diseases, and, according to Schönbein, not unfrequently with rachitis. Jahn has made a number of *post-mortem* examinations in cases of odontitis, and what did he find in such children who died from inflammation of a tooth? Why, hyperæmia of the brain, acute hydrocephalus, "gastromalacia," and always violent inflammation of the gums and alveoli, with sometimes a dark bluish color of the alveolar margin. This latter shows certainly injection, but the former prove those children to have suffered from, and died of cerebral diseases. The connexion of rachitis also points to the slight importance of the local affection, showing that the principal danger has been observed to be derived from constitutional or local ailings, not at all depending on, or connected with, the local process of the protrusion of a tooth. I have to state, finally, that there is no such thing as odontitis proper, the dental tissue being too hard and deprived of vessels for an inflammatory process to take place. What has been called by this name, is either endodontitis, or perodontitis. The former is inflammation of the inner dental pulp richly endowed with nerves and vessels, in which stasis and chemical changes may take place, and intense pain be felt, and central caries brought on. This form will sometimes be observed, but in advanced age, and not rarely in very robust and otherwise healthy men. Perodontitis is inflammation of the periosteum surrounding the root of a tooth, producing a beating pain, especially in the warm temperature of the bed. The tooth appears to be elongated, and feels sore on pressure, until either recovery has taken place or suppuration, which will permit the tooth to be removed without much difficulty. That the gums suffer simultaneously, is but natural. But this affection is also observed, almost exclusively, in adults.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. II.

CLASSIFICATION.

As a matter of convenience, some kind of classification of waters must be attempted; to accomplish this, however, with any pretensions to accuracy, either as regards chemical composition or medicinal powers, being simply impossible, I shall treat of them as

1. Sulphurous.
2. Alkaline.
3. Glauber-salt.
4. Common-salt.
5. Epsom-salt.
6. Chalybeate.
7. Astringent.

These seven classes are not divided off from each other by any marked boundaries; on the contrary, sulphurous waters are often rich in common salt, the third and fourth classes are often alkaline, chalybeate, or both. Iodine and bromine are almost invariably associated with common salt and carbonate of soda in largely preponderating proportions, and are unquestionably of less therapeutical importance than has been imagined. All the anti-strumous powers attributed almost exclusively to these agents, are found in reality in waters not containing any, or at most an infinitesimal quantity of either; I therefore build no classification on their presence.

Sulphurous waters are sometimes *sodaic*, arising in such case in the more primitive formations; frequently not sulphurous to the smell when first issuing, but rapidly acquiring this property in consequence of the absorption of oxygen from the atmosphere and the presence of organic matter; the intensity of this smell being no proof of richness in the sulphurous element, but often simply of the ease and rapidity with which decomposition takes place. After a time, indeed, this action continuing, the odor of sulphuretted hydrogen disappears; sulphides have passed into hypo-sulphites, sulphites, and finally sulphates.

The *calcareous sulphur waters* may be traced to newer strata—the transition series—and have a strongly marked sulphurous smell at the point of issue. They are not so often or so distinctly thermal as the sodaic. Both varieties are alkaline in their general characters, and pass into each other by insensible degrees.

Alkaline waters are mostly thermal, rich in bi-carbonate of soda, and amalgamate with the common and glauber-salt waters. Thus Vals (cold) affords the very remarkable proportion of more than seven parts in one thousand of the bi-carbonate; Vichy (some springs hot and some cold) from four to five; Ems (thermal) about two, with nearly the same amount of common salt. Waters in which the alkali soda (potassa is rarely found in any considerable quantity) is replaced by lime and magnesia, not to mention a minute quantity of lithia present, rightly belong to this class. They are usually but feebly mineralized, and the therapeutic value of carbonate of lime held in solution by excess of carbonic acid, has yet to be determined. Of course it is antacid, but instead of being astringent, as so commonly believed, more in deference to the old routine habit of prescribing chalk in diarrhœa, than from any positive knowledge on the subject, I believe it to have a contrary action, and think it certainly adds to, and by no means restrains the laxative action of some waters, the Rakoczy of Kissingen for example. It is curious that the common remark of persons freshly arrived in calcareous districts from other parts where the water does not hold carbonate of lime in solution, "This limestone water has given me the diarrhœa," should never have drawn sufficient attention to the subject, to have exploded this prejudice, if prejudice it be.

In the *glauber-salt waters*, the sulphate of soda is the preponderating ingredient, associated with the carbonate in large proportion. In those of Carlsbad (thermal) sixteen ounces contain twenty grains of the sulphate, ten of the carbonate, eight of the chloride of sodium; the same measure of Marienbad-Kreuz (cold) contains thirty-six of the sulphate, nine of the carbonate, eleven of the chloride of sodium. These waters are powerfully alterative, deobstruent, and resolvent, increasing all the secretions, especially of the mucous membranes, the warm diverting more to the skin, the cold to the intestinal canal and urinary organs.

The *common-salt waters*, of which Congress is a familiar exemplar, contain so large a proportion, as to prove that they derive it from great deposits of the salt itself; otherwise nearly every water contains a small proportion, dissolved out of the soil. Chloride of magnesium commonly, and, more rarely, chloride of calcium, accompany the chloride of sodium; iron is found in very variable proportions. This class, like the preceding, is alterative, deobstruent, aperient, cholagogue, especially when there is much chloride of magnesium present, tonic, and anti-strumous. The Rakoczy of Kissingen is the model of the whole tribe.

It is a mere matter of convenience to apply the term *Epsom-salt* to the next class; but it is more suggestive than any other I can make use of. The German term bitter-water, does not convey the same idea when anglicised. The whole class (not numerous) is characterized by the presence, in large proportion, of magnesian salts, especially the sulphate, the nitrate, and the chloride of magnesium. These are associated with large quantities of sulphate of soda, and of common salt. The Bitter-water of Kissingen is the best of the group, as well as the least repugnant to the taste. Sixteen ounces contain sixty-two grains of sulphate of soda, fifty-two of sulphate of magnesia, eighty-one of common salt, and forty of chloride of magnesium, with abundance of free carbonic acid. The happy mixture of the chlorides with the sulphates prevents the too great effusion of watery secretions into the intestinal canal, which these are apt to induce, thereby doing injury to digestion in the long run, while those are restrained from an excessive desquamative action on the mucous membrane. Hence their great use in plethoric and congestive conditions, where other waters are too exciting; and as preparative to a course. They may be long used without occasioning debility.

In the *chalybeate* or *ferruginous waters*, the iron is commonly in the form of proto-carbonate held in solution by excess of carbonic acid. As iron is present in a majority of mineral waters, and in some not simply chalybeate in very large proportion, this class proper includes only such as are too poor in other ingredients of marked therapeutic powers, to be conveniently grouped in any other way. Manganese sometimes accompanies the iron; and in some springs of the chalybeate class, small proportions of sulphates, especially of lime and soda, are the only other salts worth naming; while in others, instead of these, very considerable amounts of the carbonates of lime and magnesia are found, as at Langen-Schwalbach.

For the seventh class again I have adopted a title not hitherto employed in the hydrological vocabulary—*astringent.* These waters are commonly styled *alum-springs;* but not only is the proportion of alumina present at most small, and sometimes insignificant, but there is often none at all. Free sulphuric acid is the characteristic element, and the term *acid*, or acidulous, would be every way appropriate, had it not been already applied by many authors to those waters rich in free carbonic acid. That their internal use often produces a freer action of the bowels, is no argument against the adoption of the designation I have chosen, for alum itself has in certain cases the same effect. The indications for the use of this class, internally as well as externally, are readily to be gleaned, from a consideration of their composition. General principles ought to be a sufficient guide in prescribing medicines, which form as it were a "transition series" between the familiar "præparata et composita" of the pharmacopœia, and the more active and exceptional mineral waters. With regard to these we have not yet taken the first step towards discovering the real sources of their remarkable, and in the darkness of our ignorance, exceptional powers. We know next to nothing of the modifying influence of this or that element on others, with which it may be associated; and the whole subject is enveloped in a thick fog of ignorance, credulity, and positive superstition, out of which empiric observation has dragged an incongruous mass of true and false facts, the practical value of which would be immensely enhanced by proper sifting, arranging, deduction, and experiment.

The experience of more than twenty centuries has at least decided that mineral waters are *contra-indicated in all acute diseases;* an exception more apparent than real, being made in favor of the fifth class, the Epsom-salt waters, which are strongly cathartic, cholagogue, and antiphlogistic, and much more active than the proportion of purgative salts present would indicate.

In *all malignant affections:* if imprudently prescribed in such cases, they give evidence of the possession of real powers by their favoring a rapidly destructive development of the disease.

In *tuberculosis:* especially if the lungs be the seat of deposit. The tubercular *diathesis* is probably susceptible of favorable modification by their use.

In *syphilis:* with some reservations, to be subsequently noticed.

In *affections of the heart and aneurisms:* except in small alterative doses.

POSTURAL TREATMENT OF A LABOR,

WITH PROLAPSUS OF THE FUNIS.

By JOSEPH MARTIN, M.D.,

OF NEW YORK.

On the 30th of July last, I was called to attend a lady aged 35 years, in labor with her eighth child. The labor-pains had been severe for some hours, and the membranes had been ruptured while she was standing on the floor. On examination per vaginam, I found that the fœtal head had entered the superior strait in the right occipito-anterior position, and that the umbilical cord had prolapsed into the cavity of the pelvis, on the right side of the promontory of the sacrum. The pulsations of the cord were quite feeble, even in the absence of labor-pains, and not perceptible during a pain.

I at once made the patient acquainted with the peculiarity of the labor, and explained the nature of the treatment necessary to insure the life of the infant. But she became refractory, and refused to be turned upon her knees, until I threatened to leave her unless she submitted to the operation proposed. And even after she was placed in the proper position, her shoulders had to be held down by force. In the absence of pain I introduced the right hand, seized the loop of the cord between the fore and middle fingers, and carried it along the right side of the head to the brim of the pelvis, at the right sacro-iliac synchondrosis, keeping its folds downwards with the points of the fingers, until it slipped into the cavity of the uterus. The right hand was then passed over the right hip of the patient, who was placed near the edge of the bed, and the fingers were locked between those of the left hand under the fundus uteri, to sustain the weight of the uterus and its contents during the intervals of labor-pains. Having waited until three labor-pains had acted, and finding, on examination, that the cord was below, or rather above the brim, I turned the patient upon her back during the fourth pain, and in a few hours delivered her of a large living infant.

In giving the details of the above labor, I wish to show the *certainty and safety of the postural treatment of prolapse of the funis*, when proper attention is paid to a few points of practice. That is, the placing of the patient in such a position that the longitudinal axis of the uterus will be vertical, the judicious manipulation of the cord, and the prevention of its return into the pelvis. For there is good reason to believe that failures, in the trials that have been made of this method of treating prolapse of the funis, have occurred from a neglect of those particulars, in the management of such cases, that are necessary to secure success; and that these failures have led many physicians to consider the practice of little or no importance, because of its supposed uncertainty.

But the truth is, the cause of the complication, and the treatment here recommended, are alike dependent upon *gravitation.* And as the funis cannot be compressed until the os uteri is well open, it can, in every case, be conveyed by the fingers to the brim of the pelvis, when, if the long axis of the uterus be vertical, it will sink below the brim by its own gravity. And success will attend the operation with the same certainty that a leaden bullet falls to the ground when it slips from the hand; provided, that the proper methods are employed to prevent a recurrence of the prolapse.

Now, if these views be correct, a publication of the particulars in the management of each case of prolapse of the funis, treated in this manner, whether successful or not, would soon give the practice its proper place among the resources of midwifery. And I will suggest, that if Dr. Thomas will make public, as far as it is in his power, the details of all the cases treated in the same manner, that have been attended by himself and others, it would contribute not a little to bring about so desirable a result.

I hope it will not be thought that too much importance is attached to this subject, when it is recollected that Tyler Smith, after giving the results of Dr. F. Churchill's statistics in relation to the comparative mortality of infants in different complications of labor, comes to the conclusion, "That the presentation of the funis is more dangerous to the child than any other variety of labor."

I cannot close this communication without referring to Dr. W. S. Well's Summary of Medical Science for April, 1861. At page 35 the opinions and practice of Dr. Leopold, as published in the *Deutsch Klinik*, for July 7th, 1860, are given on the subject of prolapse of the funis. We are informed that Dr. Leopold considers that "gravitation, when the os is relatively lower from position, and a long cord, favor prolapse." And that, "to turn the woman on the head is the best treatment. That the next best method, and one that never fails to give satisfaction, is to place the woman on her knees and elbows, or on her side, and when this is not sufficient, the cord can be easily reduced by the hand." But we find no notice of Dr. T. Gaillard Thomas's essay on the postural treatment of prolapse of the funis, which was read before the New York Academy of Medicine, on the third of February, 1858, and published soon after, upwards of two years before the publication of Dr. Leopold's paper.

Whether the failure to direct the attention of the reader to Dr. Thomas's essay on this occasion, was owing simply to inadvertence or not, is a small matter, but all will agree, that in relation to claims to originality, we ought, in medicine as in literature, "To give the praise where the palm is due."

CASE OF
UNUNITED DOUBLE FRACTURE OF THE LOWER MAXILLA,
OF TWENTY MONTHS' STANDING.
CURED BY THE USE OF SILVER LIGATURES.

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Mr. J. G., æt. fifty-seven, was admitted into the Pacific Clinical Infirmary in December, 1857, in consequence of ununited double oblique fracture of the lower jaw, about an inch and a quarter on either side of the symphyses. The fractures were produced by the kick of a horse twenty months previously. The case was treated at first by a good surgeon, but from some cause reunion did not take place. However, that is a kind of fracture which above all others is found difficult to treat successfully, owing to the strength of antagonizing muscles acting on the different fragments, and in order to secure favorable results an extreme degree of firmness and docility on the part of the patient is required, and the greatest care and skill on the part of the surgeon.

Operation.—The operation was commenced by making an incision through the centre of the lower lip, down directly to the bone, dividing the lip fully, and continuing the incision three-quarters of an inch below the lower margin of the jaw. The soft parts were then removed from the bone by the bone chisel, exposing the fracture in part. The soft tissues being placed too much upon the stretch for the convenient use of the chisel to finish the exposure of the places of fracture, the mouth was widened an inch and a half by incisions from the commissures of the lips outwards of three-quarters of an inch each. After these incisions the necessary room was made for the free use of the chisel by which the bone was laid bare all over the places of fracture. The adventitious tissues connecting the fragments were then removed with the chisel, so that two bony surfaces would be found presenting at either fracture. A bone drill was then taken, and two holes made on either side of each fracture in the upper and lower margins of the bone. Four wires made of virgin silver, and just large enough to pass through the holes, were then introduced, and the ends of each twisted together so as to form firm knots over the fractures. The wires were introduced by passing them through from the outside first, which was effected with great ease. Such was not the case in returning them from the inside. This was more difficult and perplexing, and required a greater amount of time than all the balance of the operation. No blood-vessel required ligating. The edge of the chisel was kept so close to the bone while uncovering it, that the soft parts, including the facial artery, were raised without wounding any of these vessels. The ligatures being adjusted and the fragments firmly fixed, the wound was dressed by applying a large pledget of lint to the bone, and bringing the soft parts over it. A stitch was taken at either commissure of the lips, and three in the soft parts over the chin, bringing the lips of the wound together. The ends of the two lower silver ligatures were brought down where they remained outside the wound. The ends of the upper were brought up and placed close to the teeth by bending them to the necessary extent for the position calculated to be the least inconvenient to the patient. They were permitted to remain for nine weeks, when one end of each was cut off by the bone forceps close to the bone, and the other withdrawn. Three thin plates of bone had been exfoliated in the meantime, and found immediate egress through the openings kept up by the retention of lint in the wound as described.

This leaving of wounds open after operations upon the bones I regard as a *sine quâ non*, and never to be neglected.

In this case little deformity resulted. The incision through the lower lip and soft parts anterior to the chin, healed by first intention; and after the exfoliated bone was discharged and the wires removed, the wound left in the lower part of the chin healed rapidly by granulation and soon cicatrized, leaving but a comparatively small cicatrix. In removing the wires the upper ones were taken out through the mouth, and the lower ones through the opening communicating with the surface below the chin as above described. In four months after the operation the patient recovered perfectly; the jaw being as firm as any one, and the contour of the teeth being almost perfect.

I have a case similar to the above, in which the wires were cut off near the bone, leaving nothing but the knots outside the jaw, with the view of their remaining permanently, a plan which has proved equally as successful as that of removing them in several cases I have operated upon of late, including two in which the femur was the subject of the operation.

PRACTICAL REMARKS ON MINOR MIDWIFERY.

By EZRA M. HUNT, M.D.,

OF NEW JERSEY.

It has been well said that "Perfection is made up of trifles, but perfection itself is no trifle." To no science does the remark apply more practically than to that of medicine. The grand principles of practice are so familiar to all well educated practitioners, that superior skill consists in attention to the minutiæ which escape the notice of the unobserving as much as in the enforcement of those prominent principles which are at once suggested to all. In general practice, the air of the room, the diet of the patient, the condition of the skin, and others of what may be called incidental circumstances, may often constitute the turning-points in the life-destiny of the patient; in surgery recovery is no less dependent upon careful cleansing, and dressing, and nursing, than upon the skill of the operation; and in obstetrics apparently trivial matters sometimes have a vast significance in determining the welfare of those concerned. Anomalous cases and difficult operations do not make up the daily aggregate of practice, and it is just as important to be acquainted with the less imposing "common things" of every day application, not only because of their more frequent occurrence, but skill as to these is the befitting introduction and foundation to more prominent attainments. The readers of your valuable weekly have been furnished with an admirably condensed, yet clear and extensive record of operative midwifery, and it may not be inappropriate also briefly to draw attention to a few items which frequently may come up for consideration in the more common duties of the accoucheur in labors less anomalous.

I.—The Position of the Patient.

It is strange that a point which should be governed by the laws of muscular direction and action, and by the peculiar indications of each case, should be so much a matter of habit and fashion. It is really quite a national distinction. England lies upon her left side, the French and Germans on the back, Ireland gets on its knees, and America, following out its general characteristics, takes whatever position it sees fit.

It is frequently no unimportant matter, in a therapeutic point of view, which position is assumed, and yet the generally expressed preferences have reference to habit, choice, etiquette, or are in some other way arbitrary. Up to the time when the fœtus becomes engaged in the superior strait, and even when "bearing down pains" are fully commenced, the position is a matter of no great consequence, and the inclination of the patient to be generally uneasy and shifting, is not to be interfered with. In the earlier part of the second stage of labor, where there is no peculiarity of position on the part of the uterus, a position upon the back, with the shoulders slightly elevated, is that which nature would indicate. Here all the limbs are free to assume the position of greatest force, the proper muscles are relaxed, and the proper ones capable of tension, and in no other position can the same amount of muscular power be exerted at as little outlay. With the child at the inferior strait, a slight elevation of the nates by means of a small hair or straw pillow, instead of feather, both gives a semi-stationary point, from which, as well as by the arms and feet, to make exertion, and at the same time simulates the natural curve of the sacrum. With those conditions, and both knees semi-flexed and apart, at pleasure, we have, we think, so far as anatomy can indicate, the most favorable muscular action.

But there are such positions of the uterus as may demand a variation from this position. A case or two will illustrate better than a generalization. A while since, in the practice of a friend, I was sent for by him to relieve his prolonged waiting, and to give him an opportunity to procure his instruments for removing the child. In watching the case, my attention was drawn to the position of the uterus, and having somewhere seen reference to it as often an unsuspected complication, it occurred to me whether in this case it had not a retarding influence. A careful examination, especially externally, soon convinced me that such was the case, and a change of position to the right side, and almost upon the abdomen, was very soon followed by delivery.

A more extended experience and a synopsis of a few cases, has led me, not very unfrequently, to detect this complicating cause of protracted labor. The fundus of the uterus may incline too far forwards or backwards, or too far to the right or left side, so that the normal contractile direction of some of the muscular fibres may be, and is interfered with. A pendulous abdomen, a bent, sitting posture, a malposition of the child, or a habit of reclining always on one side, may occasion this, and not unfrequently women themselves detect this "one-sidedness" or obliquity of the uterine tumor. Flexions of the uterus, not very long since derided as hypothetical causes of uterine disease, have since been proven to be so, and I am convinced that like difficulties, modified by the conditions of labor, give imperfect direction to uterine contraction.

In the following case, I regarded the forward inclination of the womb as a source of delay. A large, well formed woman, with unusual frontal abdominal development, after suffering troublesome pain for twenty-four hours, sent for me at six o'clock P.M. I found the pains of a regular, frequently severe, bearing down character, but examination proved the os uteri beyond reach. For an hour or two the pains continued persistently, severe, bearing down, but, while the uterus could be felt, its os was still beyond reach. Fearing the need of interference from malposition of child, I introduced a portion of the hand into the vagina, and found the os uteri with each pain pressing directly and severely against the sacrum, causing intense suffering, but no other complication was detectable. A careful dragging forward of the os while each pain was receding, soon seemed most effectually to comfort the patient, and hasten the delivery. I have no doubt, therefore, that malpositions of the uterus during gestation, and perhaps chronic flexions, give mal-direction to uterine contraction during labor.

II.—THE VALUE OF EXTERNAL MANIPULATION.

By tracing with the hand over the abdomen the shape, size, and position of the uterine tumor, the position of the fœtus can often be either determined or important corroborative evidence attained. It is always a good lesson to watch a thorough diagnostician in his manipulations. He does not jump at conclusions; he does not rely upon one source of evidence when others are available, but getting together all the proofs with such celerity or slowness as the case may demand, he weighs them all, and when he arrives at a conclusion, it is justified by conclusive reasoning. With the hand and fingers, he who has learned palpation, or the science of touch, will knead away fat or omentum, determine much as to the condition of the liver, trace the alimentary curve, detect induration in the stomach, or enlarged mesenteric glands, and thus arrive at very accurate conclusions. The same methods are even more applicable to the uterus. We know directly what to look for; the substance searched for is bulky, the uterine walls diminished in thickness, and but little, comparatively, intervening between the child and the hand, so that no small aid in determining position, may, if need be, be derived from this source. Besides, external manipulation is often highly valuable as an aid in successfully accomplishing any necessary operation. In early practice, an older practitioner and myself once failed in an attempt at turning, in which careful external pressure, and steadying of the abdominal walls, were evidently highly serviceable in another and successful effort. The following case still more fully illustrates its value: At two o'clock A.M., I was called to see a servant girl in concealed labor, who, under the pretence of an attack of colic, and being most of the time alone, had been suffering severe labor-pains. On examination, I found the body of a child at full time protruding from the vagina, nearly to its axilla, the abdomen towards that of the mother, and the chin firmly impacted over the symphysis pubis. On inquiry, I found this state of things had existed for two hours, severe pains every few minutes, pushing the head more and more firmly upwards over the symphysis. External examination revealed the face and head to the touch almost as plainly as if no abdominal wall covered them. The child was dead and placid, and no movement of the body had any control over the part which, to all force applied by way of vagina, seemed perfectly immovable. I directed an unprofessional gentleman present, to make strong upward and backward pressure upon the face and head over the symphysis, and then with the fœtal arm, the hand of which in labor has been elevated to the side of the face as a partial lever, we overcame the impaction and made the necessary turn. Without the outside pressure, an hour of persistent effort had been unavailing, and I should not without it have succeeded in changing the position of the child and safely delivering the mother. Besides such cases, inertia of the uterus may often be overcome by friction, its central position in the mesial line be aided, its contraction and facility in removing the placenta when necessary be secured by pressure thereupon, even early examination be made more satisfactory by pressure externally with one hand while using the other, and this importance attaches to these external aids in repeated cases.

III.—PROPER TIME FOR RUPTURING THE MEMBRANES.

This, some say, should, except in cases of turning, always be left to nature, and Denman I believe makes it a part of his definition of natural labor. By several other writers it is spoken of as the completing part of the first stage. Not very unfrequently, however, the practitioner feels himself justified in hastening the process, and it is important to determine on what grounds interference is justifiable. After labor has commenced, up to a certain point the bag of waters is of great aid in the mechanism of parturition. It is the best mechanical means of opening the os tincæ, and its yielding yet at times firm pressure, like a rounded wedge, opens the round muscles much better than a surface like the occiput. After the os is sufficiently dilated I know of no purpose it can serve in the economy of labor. As my rule is to trust to nature, I have had frequent opportunity to appreciate the effect of letting nature alone; but as we have not the human form to deal with as it came perfect from the hand of its maker, we have often occasion to modify special cases by the laws of general action and design. In membranes there is a great difference in tenacity and thickness, in no wise proportioned to any particular demands of each special subject, and so far as we can reason, I see no value in the uterine waters after a fair distension of the os. Two or three times I have taken children from the membranes entirely unbroken at birth, and surely there was need of normal interference here. Sometimes in labors tedious in the first stage, the parts become hot and dry, and the very moistening from the waters pushed forth at each pain proves as valuable an aid as the bag itself against a hard, rigid os. There are, we think, three indications, which, in labors not complicated by any of the circumstances termed anomalous, justify an artificial rupture of the membranes.

1. *Where the os is already well opened, and the pains of a decided bearing-down character.*—This is a class of cases in which the labor will generally proceed to its termination without any interference whatever, and hence the side of caution is not to be too ready to evacuate the waters, but not infrequently, by tenacity of the membrane, the head is delayed in being engaged in the inferior strait, and the rupture will diminish the amount of pain, and expedite labor. Where the os is low down in the pelvis, dilated to the size of a large dollar, dilatable, and the bag of waters actually protruding with each pain, there are certainly many cases, such as weakness of the patient, great nervous anxiety, etc., which will justify this slight interference. I have certainly seen cases where, after this state of things had existed a little time, and the head, instead of engaging in its pelvic passage, seemed thrust upwards by the contracting womb, the waters occupying the lower part, when in due time a rupture would at once aid it in settling into position, and thus aid delivery. With the doctrine of "non-interference" duly impressed, and the idea suggested experience will decide, when we may thus modify our management.

2. *Long continued bearing down pains in natural labor, but without much progress*, always should call our attention to the membranes. The waters have a dilating power, but beyond, this unbroken, they do not aid in expulsion; and whenever the pains plainly assume this decided bearing-down character so decidedly in contrast with the smarting, grinding pains of dilatation, it points us to the question whether this kind of interference may not be proper. This change in the character of pain, more than any other, is an appreciable distinction between the first and second stage of labor, the dilating and expulsive process. When the os is low in the pelvis, and pains of this character have been for two or three hours very persistent without accomplishing much, even where the dilatation of the os was not as great as has been mentioned, a rupture will sometimes be attended with marked benefit. We cannot afford to lose these kind of pains which are so necessary, and often the os shows itself, though not much dilated, to be quite dilatable. This can in some measure be determined by its feel before the rupture. Here again judgment must be used, but it will sometimes modify the undoubtedly correct general law.

3. *Over-distension of the uterus sometimes justifies evacuation of the waters.* A recent case of retarded labor illustrated this to myself. The abdomen was greatly distended, and by placing my hand lightly upon it, I found the fundus and body of the womb exceedingly tense by the severe muscular contraction; and though the pains were evidently of the expulsive type, the os, after several hours, was not distended to the size of a quarter of a dollar. Contrary to my usual rule, I ruptured the membrane, and a very large discharge of water took place, but the pain entirely ceased, and my anxiety increased. After a little time, however, the uterus, exhausted by its useless efforts and rested by the cessation, resumed its work, the head sank into the pelvic cavity, the womb readily dilated before the fœtal head, and labor was soon accomplished. I was, as I have been in other cases since, fully satisfied that an over-distension had prevented the contraction of muscular power in such way as to obstruct the os. I believe, with the womb, as with a thin india-rubber bottle, forced over-distension will cause contraction at the os, and prevent even the pains from overcoming it. Even the hand, in grasping a round body too large for it, cannot contract with adequate force thereupon. These two references illustrate what may occur in an over-distended uterus. An injudicious rupturing of the membranes may do harm, but the objection thereto on the ground that it brings the hard head against the os, is not an insuperable one. The head forms its own cushion of soft tissue, and when the waters are broken several days before labor, it seems seldom to cause trouble to the mother. Such facts, though they in nowise disprove the general law to let nature work in its most usual way under ordinary circumstances, yet may authorize judicious exceptions.

IV.—Difficulty from a Small Pelvis and a Large Head.

In these labors can we furnish any aid by assisting the loose bones of the cranium to overlap each other? Not only are the bones of the head movable upon each other, so as to accommodate themselves to the cavity through which they must pass, but in severe labor the sutures will now and then be found overlapping each other, thus certainly diminishing the natural diameter. Following this hint, I have in some severe cases facilitated the overlapping by moderate pressure on the edge of one bone as the womb contracted down upon the occiput, and have thought that, without injury to the child, it has hastened the desired delivery. I make the suggestion as worthy at least of a passing thought. A practitioner of New York named to me as desirable, in a certain class of cases, the giving direction to the axis of the neck of the uterus by bringing the os tincæ at each pain, by the mild force of the finger, more and more opposite the vaginal opening. I regarded the suggestion at the time with ill favor, and as belonging rather to the department of meddlesome midwifery, although his large experience and clear defence of it seemed to justify, in a proper case, the trial. I have since been led to regard the idea as worthy of notice. I think, without doubt, labor is sometimes retarded by a wrong direction of the cervix, even when the body and fundus of the womb are in proper position. I think I can confirm the opinion modestly suggested by Maunsel and Gilman that "indisposition to dilatation may depend upon a jamming of the anterior portion of the cervix between the head of the child and the symphysis pubis, in cases in which the os uteri is turned more than usually backwards and upwards towards the promontory of the sacrum." In such a case the natural relief would be the slight bringing up of the os just at the commencement of each pain. I am confident I have been able to avail myself in some tardy cases of this idea with good advantage.

V.—Pressure of the Lip of the Uterus backwards.

When the labor is far advanced, "press back the lip" is another asserted means of aiding delivery not usually referred to in the books. Where, for a long time, the head has presented through a well-opened os, and yet seems with each pain to just fail in passing until in fact it becomes almost stationary; the head scarcely receding at all, but the rim of the uterus binding itself about it at the height of the pain, the ball of the finger resting upon the child's head at the point of contact, and passed backwards and forwards, and around along the edge with a slight pressure back, has thus a tendency to help it over. If this be done without sense many objections could be urged thereto, such as danger of rupture, irritation of the os, etc.; but all these can be urged against forceps, and a good many other medical acts good in their place, but bad, very bad out of it. The idea is most applicable in those cases threatening impaction, in which, if every resource is not made available, instrumental interference is likely to become a necessity. I have sometimes found that able practitioners do in their practice what they do not like to recommend in lectures or books, lest others should apply it without careful discrimination, and then quote them as authority.

In some of these cases of impaction is not the trouble as much an uncontrollable state of the muscular fibre from pressure about the cervix, rather than the mere narrowness of the passage? If so, the moment it is freed it resumes its power. It has occurred to me more than once, that in this kind of case, after very slowly efficient pains, the edge of the womb has of itself passed a little over the largest diameter, and yet the head not have itself fully passed its greatest circumference through the inferior strait, the womb, thus released from its pressure, has then acted with a much more decided expulsive pain, and a brisk movement been made. It is merely a hypothesis.

VI.—Sustaining the Perineum.

The following facts are worthy of consideration:

(*a*) Pressure may be made too early, causing a constricted position of the part, and much unnecessary trouble. When the perineum is first made tense during a pain, is generally quite early enough.

(*b*) Pressure prevents fissure or tearing.

(*c*) Pressure aids in the natural curve of delivery, and may be made available in preventing undue retrocession of the head after each pain.

The first of these propositions is old, and of relative importance. In natural labor it will rarely occur if no act is offered, but does frequently happen as a result of pressure, and a pushing back of the head, thus admirably facilitating a split. A mere sustaining upwards and forwards with the palm as concavity of the whole hand is all that is required. This method (*b*) also makes itself available for the other purpose, for it imitates and prolongs the friendly curve of the sacrum, and aids, so to speak, in turning the head out of its receptacle, and thus relieving the patient.

(*c*) When the head has come to be nearly delivered, but recedes so much that each pain seems hardly sufficient to both bring it forward and through, it seems sometimes desirable to retain the occiput in its advanced position, until another pain aids it onwards from that point. When very low down and thus retarded, the hand or fingers far back on the perineum, pressing just as the pain recedes will tend to hold it in position. Pressure in this more relaxed state of the perineum near the anus is not objectionable, and at this stage, as heretofore, you do not need so great retrocession as you do previously. A quiet on the part of the patient or avoiding of a long drawing of breath, and the plan suggested will the better prepare for another expulsive effort. These little attentions, if they did nothing more than dispense with one or two pains, would be humane and considerate; but sometimes they are the minute pivots and turning-points of results.

Tin Fracture Splints.—For a long time, we have been in the habit of using tin instead of wood for fracture splints. This material is so far superior to all others used for the purpose, that we are greatly surprised that manufacturers of patented splints have never adopted it instead of wood. It is lighter, stronger, far cheaper, and can be moulded into any desirable shape by the surgeon. Thus, as often the case in compound fractures, it being desirable to have some particular part exposed, the surgeon may go to any tinner, and procure, at a very trifling expense, the splints, with the necessary openings, which cannot be the case with the use of wood. *Any* tinman can easily make the splints, but few workmen can make them properly shaped of wood. We would particularly commend them to young practitioners, who may not be able to equip themselves with the more costly appliances, in the commencement of their practical careers.—*San Francisco Medical Press.*

Reports of Hospitals.

NEW YORK HOSPITAL.

FIRST SURGICAL DIVISION.

J. L. LITTLE, HOUSE SURGEON.

Case of Complete Dislocation of the Head of the Right Tibia forwards—Re-luxation of the same bone backwords—Dislocation of Thumb—Fracture of Scapula, Ribs, and Left Tibia.

(For the following case, I have availed myself of the notes taken at the time by *Dr. D. B. St John Roosa.*)

This patient, a man forty-five years of age, of good constitution, was admitted on the 12th day of February, 1861, Dr. Halstead attending surgeon, having a short time before fallen from a ladder to the ground, about fifty feet. The ladder slipping from under him, patient struck on his feet, and then fell on his right side. On admission, patient was suffering considerably from the shock of the injury, although not entirely unconscious. On examination, a well marked case of dislocation of the head of the right tibia forwards was found. The lower end of the femur seemed to be driven backwards and downwards, the head of the tibia riding completely over it, causing a shortening of the limb of over two inches. The articular surfaces of the lower end of the femur and the head of the tibia were distinctly mapped out. The patella and its ligaments were floating above. Besides this, there was also a fracture of the left scapula, fracture of the seventh and eighth ribs with emphysema, fracture of the head of the left tibia; line of fracture was oblique, commencing on the outside about three inches below the joint, and running upwards and inwards into the joint; crepitus distinct.

Treatment.—Stimulants were given, the hot-air bath applied to bring on reaction. In an hour, patient rallied somewhat, although the integument of the dislocated leg remained cold. On arrival of the attending surgeon, the dislocation was reduced in the following manner: extension on the leg, and counter-extension on the thigh, were made by two assistants, and while the knee was grasped by the attending surgeon, strong extension was made, and the limb slightly flexed, when the bone slipped to its place. The limb was secured on a double inclined plane, and an evaporating lotion was applied to the knee.

The other fractures were treated in the usual manner. During the night the patient was very restless, and in tossing about the bed succeeded in *producing a new dislocation of the same knee; this time the dislocation was backwards instead of forwards.* It was promptly reduced, and placed in the straight position, and five lbs. extension applied, and a splint placed on the posterior aspect of joint. About thirty-six hours after the injury, considerable febrile excitement with delirium took place. Leg still remained cold; on the fifth day patient was still suffering from considerable fever, but improving. The distal phalanx of the left thumb was discovered to be dislocated backwards; it was immediately reduced and secured on a splint.

From this time patient continued to be delirious, with more or less fever. The leg gradually became gangrenous; the temperature, the bluish hue, the large vesicles and the peculiar odor, all indicated that the life of the limb was destroyed. No pulsation of the femoral artery could be detected below the junction of the middle with the lower third of the thigh. On the eleventh day after the injury, a consultation was held, and amputation of the thigh was deemed necessary, but the friends of the patient objected, preferring to wait a little longer time; on the thirteenth day they gave their consent, and amputation of the thigh was performed at seat of election. But the operation had been delayed too long, and although stimulants, tonics, and beef tea, were freely administered, patient gradually grew worse, and on the fifth day after the operation, and the eighteenth day after the injury, he died. The post-mortem examination of the body was not allowed.

On examination of the amputated limb, the following lesions were discovered:—Rupture of the anterior and posterior ligaments, and of the ligament binding together the semilunar cartilages. The internal and external lateral ligaments were also ruptured. Part of the head of the fibula was torn off, and remained attached to the external lateral ligament. The ligamentum patellæ was uninjured. The heads of the gastrocnemius and the popliteal muscles were lacerated. The popliteal nerve was somewhat enlarged at point of pressure, and of a reddish hue; no evidence of rupture to the naked eye. The vein showed signs of inflammation, being thickened and filled with coagulum, at a point below seat of the greatest pressure. On laying open the artery, at a point opposite the external condyle, the middle internal coats were found to have been ruptured, and had retracted for a space of three-quarters of an inch, the fibrous character of the outer coat, which was intact, being plainly discovered in the hiatus. The upper edge of the middle and internal coats were curled under towards the axis of the artery, so as to embrace quite firmly the base of the clot. This was about two inches in length, and quite firm, rather pale in color, and reached up to the first divergent vessel, and was in all respects similar to that resulting from ligature of a vessel. The artery both above and below this point, especially the former, presented evidence of inflammation from the thickened and congested state of its coats, with more or less detachment of inner coat, resting upon which seemed to be shreds of fibrin, which, however, were prolongations from the principal clot. At different points in the course of the artery were recognised patches of atheromatous or calcareous deposit, one patch situated at the bifurcation of the popliteal artery. The tissues of the leg from the ankle to the knee, were found in a state of moist gangrene, which had also affected the toes, and a portion of the heel, dorsum, and sole of the foot.

American Medical Times.

SATURDAY, AUGUST 17, 1861.

THE MEDICAL STAFF OF THE U. S. ARMY.

The memorials are unanimous in urging:

> "The claims of the medical officers of the army to a position and remuneration more commensurate with their position as men of scientific acquirements, and the importance of their services to the country, as the only means of obtaining for the medical department of the army the services of those best qualified to render that prompt and efficient aid which the exigencies of the service constantly require.
>
> "That it is desirable and important that such inducements should be held out in connexion with the medical department of the army, as would attract men of talent and acquirements to adopt this department of the public service for their professional life.
>
> "That the much more rapid promotion of the executive than of medical officers during time of war implies also an undeservedly low estimate of the exertions of the latter, who share the dangers of battle, privation, and climate, and are exposed to the additional risk of life from constant intercourse with the wounded and diseased, but unlike their fellows, reap from this service, however distinguished, neither advantage nor reward.
>
> "Nor would it be too much to expect a participation in those honorary rewards from which we are at present virtually excluded, partly, we suppose, from an idea that we are members of a civil department, although exposed to the fire of the enemy in the execution of our duties.
>
> We submit that we ought to be classed among the purely military branches, and reap our share of the honors accorded to them, the exclusion from which in all campaigns we most deeply feel.
>
> "But the most galling, the most unmeaning and purposeless regulation, by which a sense of inferiority is imposed upon medical officers, is by the refusal to them of substantive rank.
>
> "It is impossible to conceive how such a system as this can have been maintained so long, on the strength of no better argument than that it has been and therefore it ought to be.
>
> "There are several particulars in which the medical service, as a body, lies under great disadvantages, and which they regard, justly in my opinion, as grievances that ought to be removed. I refer to the inequality which now prevails between the position of a medical officer and that of his brother officers in respect of pension, honors, and rank.
>
> "The absurdity of regarding the medical officer as a non-combatant is, I believe, abandoned.
>
> "The medical officer comes constantly under fire like other men. Every campaign which is fought exhibits the names of the medical officers in the lists of killed and wounded, and the returns invariably show that they still more often fall victims to their own exertions on behalf of their suffering comrades."

It is recommended

> "That the injurious inequalities between medical and other officers should be removed."

—*Extracts from the Records and Evidence of the British Commissioners appointed to inquire as to the Regulations affecting the Sanitary Condition of the Army, the Organisation of Military Hospitals, &c., &c. London*, 1858.

The regular medical staff of the army is the active agent of the profession in carrying out its function of life-conservation, in military hospitals, in camp, and on the field of battle. It is the executive officer of the laws of sanitary prophylaxis, and the gentle but firm hand which administers medicinal remedy and surgical interference in inevitable disease and injury. It is the channel through which the talent and acquirement of eligible members of the profession are directed to the performance of these high duties, and it is the judge of the physical material out of which the army is created. It holds in its hands the strength, power, health, and material efficiency of an army. The lives and happiness of individuals and families tremble upon its decisions, and the question of victory or defeat and the life or death of the state often hung suspended upon its knowledge, skill, and fidelity. It knows and appreciates its exalted powers and prerogatives, and has fulfilled the multiform duties growing out of them with unwavering courage and devotion, and with a knowledge, skill, and consequent effectiveness which have kept pace with the advancement of science, and the exigencies depending upon recent improvements in the art of war, and the tremendous rapidity, force, and precision of military movements.

Hygiene and military surgery, as sciences, are of comparatively recent origin, and are almost entirely ignored by military tradition. The great majority of the older sailors and soldiers entertain a profound contempt for both, and consider themselves quite as good authorities as the ablest and most experienced sanitarian or surgeon, excepting when they themselves are severely hurt or sick; and devoutly believe that every complaint made by a common man is an attempt to shirk duty or avoid danger. They never believe the forewarnings of impending sickness, and reproach the medical staff for not curing it when for want of timely prophylaxis it has broken out and become almost wholly unmanageable. The lessons received from experience are speedily forgotten, and the representations and records of physicians slighted and often entirely disregarded.

The more enlightened and better educated younger officers have, however, begun to see and appreciate the truth, and to understand that in our modern system of warfare hygiene and pure surgical science are indispensable, and they are willing to place them on the proper basis for complete efficiency; but the number of advanced and thinking men in an army is comparatively small, and they have little weight on public opinion, the vis vitæ of legislation. The progress of true and really conservative ideas is always exceedingly slow, and in no department of human affairs more so than in medicine. The physiological effects of alcohol were known for thousands of years before the analogue of the inhalation of etherous vapor to suspend sensation was discovered. The innocuousness of certain metallic substances in contact with living tissues was understood long before it was practically applied and developed by Dr. Sims in the use of the silver suture. The art of stamping medals was practised two thousand years before it ripened into printing. It may be long before the legislation of the country can be sufficiently instructed to raise the medical staff of the army to its proper level, but it is none the less imperative to urge the consideration of the subject, and to present it in its true light to the profession and the public. The British Sanitary Commission, the facts elicited and published by them, and the astounding consequences of following blind routine and adherence to military tradition, with the astonishing and gratifying results of a change of system, have done more to brush away the cobwebs of vulgar and ignorant prejudice than all the *à priori* arguments and appeals to reason and common-sense could have done in a thousand years. These facts, together with the heroism displayed by our own officers in Mexico, and by the British and French in the Crimea, the Germans in the Schleswig-Holstein war, the officers of the Indian army in the late mutiny, and still more recently the war in China, with the literature growing out of these terrible conflicts, have swept away many erroneous opinions which had become engrafted in the public mind by, we must confess, numerous shameful experiences of an opposite character, and by the wit of the novelists, poets, and dramatists of the last century. As medicine rose to the level of modern practical intellect and science, it had to carry with it many antiquated, absurd and silly doctrines, customs, and practices, which made it a fair subject of ridicule and satire. It has begun to shake off the shams and absurdities of a past age, and to stand forth in the severe sculptured simplicity of pure, rigid, scientific truth. The poets and satirists who can make modern first-class medical and surgical science a successful subject of ridicule, are welcome to do it. They can be answered by the pathos and sublimity of agony assuaged, stout arms saved for labor or combat, pestilences arrested in full and fell career, and female misery completely, permanently, and safely relieved. There has always been a Catholic truth in medicine, and different individuals and epochs have held and practised more or less according to peculiarities of culture, circumstance, and degree of civilization; but the present age presents a picture of harmonious co-operation throughout the world in the search for and rapid apprehension of scientific and hitherto recondite truths, which no former age can parallel, and which gives an almost infallible ground of hope for the future of the race.

The Medical Staff of the U. S. Army, since its reconstruction upon its present basis, has been governed in its growth and development by the internal spirit of professional justice and noble enterprise. It has risen by its own internal force and vitality to a level with any of the scientific departments; and very many of its members have won for themselves, and for it, the highest respect and consideration from both the army and the profession, as well as from the public.

The members of the medical staff have shared cheerfully and courageously all the perils and hardships of the mountains, plains, and deserts. They bore without a murmur the miseries and dangers of Florida; they went through the Mexican war, side by side, with their combatant comrades, and were the only staff corps which lost a member in battle. They encountered with equal spirit and patience the hardships and privations attendant upon the settlement of New Mexico and California. They have never spared labor, suffering, or personal sacrifice, in the discharge of their duty. It has not been uncommon for medical officers to ride great distances unattended through districts infested with wild beasts and Indians, and, when serving with troops (as often happens on the frontier) scattered over a great extent of country, to remount at evening a fresh horse after a fatiguing day's march, and continue on alone through the entire night. They have given so many proofs of courage, ability, and fidelity, that they are justly endeared to both officers and men; and they have won for themselves the most enviable personal and social position in the army, and in the communities where they have been stationed. It has often been remarked that the MEDICAL was the most brilliant corps in the army.

They do not enjoy, however, their legitimate and well-earned rights in substantive rank, equal participation in honors and rewards and in regular promotion beyond the rank of major. The present and prospective increase of the army, and the vast increase of labor and responsibility, should, if no other reason has force, induce the line of the army to favor the increase of medical rank.

The merit, character, and efficiency of the Staff are universally acknowledged. The severity of their labors in time of war, and often in time of peace, is also known and appreciated; their unflinching courage under fire, and their preservation of the calm, philosophical spirit necessary to perform delicate and difficult operations on the field, is not disputed; their indispensable necessity is known and felt; radical distinction of command, military and medical, is obvious to common sense; the necessity of command is also obvious. It becomes then a question, why it is not granted, and why the honors and rewards which are held to belong exclusively to the function of command and exposure, are not also superadded.

The true spirit and idea of military organization is, that every man is either an officer or soldier, and that special officers and men are assigned to specific duties according to previous education and known acquirement. There would be no incongruity, in the absence of an engineer, for a surgeon who knew the science to perform engineer duty, nor for an engineer who understood the principles of surgery to arrest hemorrhage, tie an artery, or amputate a limb. It is understood that a surgeon must assume command when all the combatant officers are killed or disabled; and it was done with great credit and excellent results in India. It is also imperative upon combatant officers to exert themselves in saving the lives of soldiers in the absence of the surgeon, to the extent of their ability. For this reason, a course of lectures on anatomy, similar to that given by Prof. Knight to the senior class of Yale College, should be delivered yearly at West Point, accompanied by one on surgical principles, and the class should undergo examination on these subjects. For a similar reason the medical officers should be furnished the means of studying drill and tactics, and the principles of military science. Administration is indispensable for the successful enforcement of sanitary laws, the efficient conduct of hospitals, and for the prompt and certain relief, and removal of the wounded in battle. The surgeon in-chief should not be embarrassed by merely military or other details, but the officers commanding the respective departments which are placed at his disposal, should report to him and act under his orders. Responsibility, danger, and accountability, justify and exact command. It requires more science, coolness, foresight, and courage, to prevent typhus from breaking the lines of an army than it does to resist cavalry in hollow-square; it is easier to silence a battery than to shut the devouring jaws of cholera; it is less difficult to charge an enemy than to face a pestilence.

Danger on the field is also one of the claims for honor and reward. The surgeon, in modern warfare, is equally exposed with the officers. No intelligent or honest man deserves to claim anything extraordinary for simple courage—every officer is bound to behave coolly, bravely, and calmly under fire, and to do his duty simply without any regard for the personal risks and dangers to which he is exposed. The country, however, is bound to recognise and reward his self-control and self-sacrifice which are exercised for the common good. The surgeon is called upon to exercise the same self-control and make the same self-sacrifice with the more exposed combatants, he is therefore entitled to the same class of honors and rewards. The country should honor him as a soldier, the profession should devise an appropriate class of distinctions to honor him as a physician.

It is not probable that the necessary changes can be made immediately, as probably neither the legislature nor the military mind is prepared for it. The medical staff has done much for itself, and has demonstrated the possession of intrinsic virtue and power of growth and development. It has conquered its present enviable position by merit and virtue alone, and against great odds and numerous petty but damaging acts of injustice. Assistant-Surgeons have been, as a rule, compelled to assume the responsibilities and perform the functions of surgeons without the pay or rank. The limited number of the corps has made leaves of absence, excepting for sickness, almost unattainable, and the medical staff has not been represented in the commissions sent abroad for inquiry and improvement. Nevertheless it has held its own, and can hold its own, and it is to-day higher in relative rank and honor than any other in the world.

The medical staff occupies a peculiarly important and conservative relation towards the medical profession. The medical staff has been true to the spirit of the profession; it has been a rock against which the waves of quackery have beat in vain. It has remained pure in the midst of general corruption, and has contributed more by its strictness and impartiality of examination to sustain and preserve the tone and character of the profession of the country than all the schools and universities put together; and in the midst of almost universal laxity and demoralization on the subject of medical qualifications, has adhered steadily to its high standard and acted exclusively on the principle, that the lives of the soldiers of the republic were too sacred to be intrusted to ignorant or unskilful men. It has also been studious in its selection to choose none but gentlemen, who not only understood the science of medicine, but who could do honor by their personal characteristics to their position and profession. The staff has made its selections from the élite of the young graduates, and it has from time to time returned highly accomplished men to the ranks of civil practice. The memory of the late illustrious and lamented Isaacs will grow green as long as there is a patient student left to search for truth, and as long as there is a single honest and true-hearted physician to labor for the preservation of life and the relief of suffering. The profession owes a debt of gratitude and affection to the staff which cannot be extinguished. It can show its appreciation of its merits and its labors, and of its true and heroic medical spirit, by bringing its claims before the country, and endeavoring to form a public sentiment which shall result in the legislation necessary to place the staff and its adjunct in the volunteer service upon their proper footing. It is reasonable and just, and capable of demonstration by the hard logic of facts, and consequently can be urged with a prospect of success, that they are entitled to substantive rank and promotion. The great motive is the best good of the nation, and the preservation of the lives of our citizens, which are the life of the nation. We can no longer afford to waste life. It will soon become our most precious product. Sound political economy, common humanity, and military science, all demand that the medical staff be recognised for its full value, judged by its accomplished labors, and raised to the position it can justly claim.

There is no thought or intention of seeking or receiving powers or functions beyond its province. The profession is satisfied with its great and, next to religion, divine mission, and asks only that in its purely human relations and natural ends it be furnished with ordinary human support and encouragement, and the power and material aid to accomplish those ends which are to economize life, save suffering, promote efficiency, and thereby assist in sustaining the nation in her life struggle.

We have discussed the new corps of Brigade Surgeons; we shall return to this subject, and make certain obvious remarks and suggestions upon the regimental staffs of the volunteer army. In the meantime we urge unanimity, loyalty, and fidelity to the profession, upon all who embark in the public service; and we hope that the views we have put forth will serve the purpose of bringing the medical staff, the profession, and the volunteer surgeons into closer and more cordial relations, and thereby subserve the great object of the profession—life-preserving.

THE WEEK.

We have good reason to congratulate the country, and more especially our troops in the field, on the passage, at the recent session of Congress, of an Act entitled: "An Act providing for the better organization of the military establishment." This was approved by the President on the 3d of August, and is now a law.

Among other wise measures in the bill are two of especial interest to the Medical Profession. These are in the sections relating to the diet of the troops, copies of which are given below. In these, we find provision made for the addition to the regular ration, of a fair amount of fresh vegetable food or suitable equivalents, as well as the authorized purchase and issue of luxuries and delicacies for the use of the sick and wounded, wholly independent of the presence or absence of "Hospital Fund," and thus not at the mercy of the providence, foresight, judgment, or caprice of individuals.

In regard to the wisdom of the addition to the regular ration of fresh vegetable food, we can hardly say too much. Had such a law been in existence years ago, we would not have had the unpleasant task, in the number of this Journal published on the second of March last, of bringing to public attention the existence of two thousand eight hundred and three cases of scurvy in the small army of the United States for the five years ending December 31st, 1859. We have, however, the satisfaction of believing that the facts, as there stated, have had much to do in influencing the passage of the recent bill, and that we thus have tangible evidence that our efforts as journalists, in behalf of humanity, occasionally meet with success.

Sec. 13. *And be it further enacted*, That the army ration shall be increased as follows, viz. Twenty-two ounces of bread or flour, or one pound of hard bread, instead of the present issue; fresh beef shall be issued as often as the commanding officer of any detachment or regiment shall require it, when practicable, in place of salt meat; beans and rice, or hominy, shall be issued in the same ration in the proportions now provided by the regulation, and one pound of potatoes per man shall be issued at least three times a week, if practicable; and, when these articles cannot be issued in these proportions, an equivalent in value shall be issued in some other proper food, and a ration of tea may be substituted for a ration of coffee, upon the requisition of the proper officer: *Provided*, That after the present insurrection shall cease, the ration shall be as provided by law and regulations on the first day of July, eighteen hundred and sixty-one.

Sec. 14. *And be it further enacted*, That there may be allowed in hospitals, to be provided under such rules as the surgeon-general of the army, with the approval of the Secretary of War, may prescribe, such quantities of fresh or preserved fruits, milk or butter, and of eggs, as may be necessary for the proper diet of the sick.

The Legislature of California has decreed that the person upon whom an abortion is practised shall be held as guilty as the abortionist. The design of this law is thus explained by the *San Francisco Medical Press*:—

> "The design was to prevent wicked female adventurers from attempting to blackmail medical men by applying to them, even when not pregnant at all, for the ostensible purpose of having an abortion produced, but who, when the doctor would, in order to get rid of them, prescribe some inert substance, would have a prosecution commenced against him for producing a criminal abortion, and cause much trouble, unless he would buy them off in the beginning. Or, what is still worse and entirely unavoidable on the practitioner's part, they could swear him guilty of producing criminal abortion, when he had not even been applied to at all in the matter. This occurred once in this city; and although the perjury soon became apparent in the case, still the idea of a respectable medical man being arraigned as a criminal, is not very palatable, even though it ultimately becomes plain to everybody that his prosecution is based upon perjury alone. As the law now is, the practitioner has only to perform his duty conscientiously to be free from this species of annoyance, while these wicked adventurers, under the assumed connexion of dear husband and wife, will have to conduct themselves cautiously, or otherwise find a quick way to the State's Prison."

The class of cases to which this law is intended to apply are not numerous. The victim of an abortion never reveals the crime until *post mortem*, when she is beyond the reach of legal penalties. The instance of malicious prosecution which the *Press* adduces, is sufficient evidence of the necessity of the law, at least, in California. We must add that this law was passed at the solicitation of the Medical Society of that State.

By a recent Act of Congress there is to be added to the Medical Staff of the Army a Corps of Medical Cadets, who are to act as dressers in the general hospitals, and as ambulance attendants in the field. A good opportunity is thus offered to those medical students who desire to enter the service of government, and a large field is opened for obtaining practical knowledge in surgery. For information as to the qualifications required, we refer to the official statement of Acting Surgeon-General Wood, in another column.

A communication appears in another part of this number which should arrest the attention of every physician, and of every medical student in the country. We refer to the renunciation of Homœopathy by Dr. John C. Peters, long the chief editor of the *North American Journal of Homœopathy*, author of several works on Homœopathic practice, and the recognised leader of that school in the United States. His *exposè* deals a fatal blow at that stupendous system of charlatanry.

At the moment of going to press, we learn that the following Surgeons, taken prisoners at Bull Run, have been released on parole:—Eugene Peugnet, of the Seventy-first regiment, New York; Foster Swift, of the Eighth regiment, New York; Edward T. Taylor, of the First regiment, New Jersey; S. C. Thimkins, of the Fourth regiment, Maine; B. F. Buckstone, of the Fifth regiment, Maine; Wm. H. Allen, of the Second regiment, Maine; James M. Lewis, of the Second regiment, Wisconsin; Gustavus Winston, of the Eighth regiment, New York; Charles Degraw, of the Eighth regiment, New York; Norval, of the Seventy-ninth regiment, New York.

We take great pleasure in adding the testimony of these gentlemen to the kind treatment by the enemy of themselves and the wounded prisoners.

Correspondence.

RENUNCIATION OF HOMŒOPATHY

By the late Editor of the North American Journal of Homœopathy.

[To the Editor of the American Medical Times.]

Sir:—I wish to put on record in your pages, not only that I have long since resigned all connexion with any and every sectarian medical society and publication, but that I now most distinctly do not believe or practise according to any one medical dogma or exclusive system. I have repeatedly been on the point of making this declaration public in some regular medical journal, as it is well known that I have often done in private conversation and in homœopathic periodicals; but frequently the pressing demands of the sick have not left me time, and at other times I have been deterred by the urgent entreaties of friends, backed by that natural repugnance which every one has to publicly acknowledge a change of opinion.

In simple justice to myself I will beg your indulgence to a short statement of my connexion with Homœopathy. When a mere school-boy, between twelve and fourteen years of age, and now I am forty-one, I was personally under the care of an aged and accomplished physician, Dr. Freytag, of Bethlehem, Penn. On my return from boarding-school to this my native city, I found many of my nearest relatives under the treatment of Drs. Gram and Gray. Thus, both in Pennsylvania and here I was early thrown in contact with many and earnest converts to Homœopathy. A short time spent in a wholesale drug store opened my eyes to the immense amount of adulterated, spoiled, and poor drugs and medicines which were then and perhaps are now sold. Not a few of my dearest relatives had not been saved from agonizing death, and some were still suffering with varieties of the most distressing forms of chronic disease, which had not been averted by all the devotion and skill of many of the most accomplished physicians of the dominant school. I commenced the study of medicine under the impression and with the fervent hope that Homœopathy, in its future and rational development, would supply all that was deficient in medicine; but all my natural instincts ever have been, and ever will be opposed to all bigoted exclusiveness and one-ideaism in religion, politics, science, and my much loved profession. As far as lay in my power, I have never been unmindful for a day, from the commencement of my career as a medical student and practitioner, of the numerous and brilliant advances in regular medicine which have been constantly progressing both in this country and abroad. I must say that I never have been a convert to the use of infinitesimal doses; they have been so repugnant to every fraction of common sense which I possess, that I have always felt absolutely degraded when making what I conceived to be necessary trials with them. I have always felt that I was doing something foolish or wrong when giving them; that I was dealing with quantities so minute and so powerless that it would be trifling with the lives of my friends and patients to depend upon them in serious cases, and with their time and comfort in milder attacks. I knew full well that Hahnemann had performed all his first cures with tangible doses, and had cited numerous instances from reliable medical authorities, in which apparently homœopathic cures had been effected with not unreasonably small doses. I determined to commence where he commenced, and if beaten back to the use of infinitesimal doses, would reluctantly but at the same time decidedly follow the results of my experience. I have never felt myself obliged to fall back upon infinitesimal doses; but, on the contrary, have been more and more successful in strict proportion as I gradually increased upon the very small quantities which I first used, and in proportion as I departed from a slavish adherence to one system of medicine. The reports of others, both physicians and laymen, frequently led me to make careful trials of infinitesimal doses in various cases, but never with satisfactory success; while many extraordinary instances of recovery from distress and sickness in which no medicine had been given, and numerous consultations to which I was called by homœopathic physicians, in which severe disease had gone on unchecked by these powerless agents, more and more convinced me that they were irrational and unsafe.

A careful study of the Homœopathic Materia Medica, early convinced me that it was very visionary and unreliable. I labored long and zealously to do my share towards giving it a more practical and common sense shape.

The dogma, *similia similibus curantur*, was long a stumbling-block to me; it seemed so utterly opposed to reason, that it was often with difficulty that I could force myself to practise according to it. But, many years ago I hit upon an explanation which was, and is still, perfectly satisfactory to me. It is self-evident that, in order to cure any disease, a state *different* from that presented by the disease must be brought about; hence a curative drug must either primarily or secondarily exert an *alterative* action; that is, if we leave mere revulsive effects out of the argument for the present. Similarity is not identity, but a similar thing, although it resembles somewhat, or even strongly, also *differs* somewhat, and even greatly. Hence, a drug which acts similar to the action of any given disease, also differs somewhat in its action, and ultimately may exert an *alterative* effect. Similarity is a hybrid consisting of a great or greater degree of resemblance, coupled with a less or lesser amount of difference; in fact, similarity may be defined as a *slight degree of difference*, quite as well as interpreting it as a great degree of resemblance. Hence, the homœopathic law *is only an apparent and fragmentary truth*, not a complete exhaustive law. It is a fragment of the great law, *differentia differentiis curantur*, seu *alterantia alterantiis curatur*, of which in its form the old established law, *contraria contrariis curantur*, is another fragment. For opposite or antagonistic things are such as *differ* in the greatest degree; while similar things are merely such as differ in the least, or a lesser degree, or in certain particulars; while in others, they may be *essentially different*. Identity excludes the idea of difference, while similarity may include only the idea of casual likeness. Upon these ideas or principles I have long thought, studied, and practised, and have gradually become more and more convinced that the homœopathic is only a partially, or even only an apparently true law; a mere fragment of the greater law of alterative antagonistic action which has been practised upon for ages.

The immense advances which have been made in the regular school in pathological anatomy, diagnosis, microscopical and chemical investigation, in auscultation and percussion, in the use of the speculum and ophthalmoscope, and in the use of ether and chloroform, necessarily force every student of medicine to give the larger portion of his attention to the publications of the dominant school. I have long endeavored to force these tangible, practical, and essential advances upon the attention of the homœopathic school, and labored almost in vain to convince the fraternity that the healing art is so far from having attained a state of perfection that no school has a right wholly to despise and reject the other, and that a wholly derogatory estimation of every other method than their own is not a necessary consequence of their adherence to the latter. Hence, I must prefer the greater to the lesser truth, and however painfully and reluctantly, must endeavor to cast my lot with other friends, other theories, and other practice.

But the homœopathists have discovered some new remedies, and renewed the use of many forgotten old ones. If consistent with the object of your periodical, at some future time I will furnish short articles on the use of Ignatia, Cocculus, Pulsatilla, Agaricus, Hammemelis, Cannabis Sativa, Euphrasia, and other remedies, simply premising that it is not at all necessary to use them in infinitesimal doses, nor always according to the homœopathic law.

Yours, &c., J. C. Peters, M.D.

CLOSURE OF DRUGGISTS' STORES ON THE SABBATH.

[To the Editor of the American Medical Times.]

Sir:—I am requested through the Medical Times by several members of the medical profession, to call the attention of the apothecaries in the city of Brooklyn to the subject of closing their stores on the Sabbath during the hours of Divine worship. Entertaining no doubt of the perfect practicability of the measure, and being personally interested in its general adoption, I take the liberty of offering a few thoughts for the consideration of both apothecaries and physicians. I know very well, as I have been in the apothecary business for some years past, that there is no occupation more confining, and that requires a larger amount of time for the discharge of its various duties, than that of the apothecary. This must be so from the nature of his employment, that of dispensing medicines at all hours of the day and night. While in most other pursuits the period allotted for repose is undisturbed, this occupation renders those engaged in it liable to be aroused from their slumbers at any period of the night, to supply the invalid with the remedies prescribed for his malady.

I know of nothing more reasonable and proper than that this portion of the community should be relieved on the Sabbath, during, at least, the periods devoted to religious worship, that they in common with their fellow citizens may enjoy the important privilege of statedly attending church. Such an arrangement might readily be effected without the least detriment to the invalid, who might supply himself with the appropriate remedies in the intervals of public worship, had he neglected to do so on the Saturday previous. In cases of great urgency demanding the immediate administration of remedies (which comparatively but seldom occur), they could readily be obtained, by directing the messenger to first visit the church regularly attended by the druggist.

The practice which now so frequently obtains of frequenting drug stores on the Sabbath, to procure simple remedies, which might as well have been obtained on the previous day, is altogether unnecessary; and its continuance is to be attributed in a great degree, if not wholly, to the existing custom of keeping open doors on that day. Were it generally understood by the citizens that no medicines were dispensed by the apothecary on this day except in urgent cases, the present objectionable practice would soon be abandoned. That an object so desirable may be accomplished, it is important that the medical profession exert their influence in its behalf, by writing no prescriptions on the Sabbath, unless from the violence of the malady it becomes absolutely necessary.

Ordinarily the physician might embrace in his Saturday prescriptions an amount of medicine sufficient to supply the patient till the following Monday. It will at once be perceived that the co-operation of the medical profession becomes necessary in order to effect the desired object with but little trouble to the apothecary, for if physicians continue to write prescriptions on the Sabbath on trivial occasions, those druggists receiving the recipes of such physicians will deem it expedient to be in a state of preparation to receive those also written on this day. Druggists generally do not pay their expenses on Sundays from the amount of medicines they sell; it is from the sale of liquors and cigars principally, and this is, I think, abominable, and ought not to be allowed. Hence the co-operation of the medical profession. Dr. Westell has informed me that this plan of closing the stores on Sundays has been put into practical operation several years past by the apothecaries of Providence, R. I. They have resolved to close their stores at half past ten o'clock on Sundays, when the bells ring for church, and not to open them again during the day. As far as my own acquaintance extends, the above resolution is practically adopted almost throughout the country.

In conclusion, Mr. Editor, I would suggest that a public meeting of apothecaries and physicians be called, for the purpose of taking this matter into consideration.

By inserting the above, you will confer a favor on the medical profession in general.

Yours, &c.,

D. J. LYSTER, D.M.,

Pharmaceutical and Dispensing Chemist, Brooklyn, N. Y.

Army Medical Intelligence.

VERMONT REGIMENTS.—3rd, Surgeon, Henry James; Assistant Surgeon, David M. Goodwin.

Surgeon S. G. J. De Camp is officially announced as the Medical Director of the Western Department of the U. S. Army, head quarters St. Louis, Mo., Major General John C. Fremont, commanding.

Dr. J. P. Colgan, of Myrtle Avenue, Brooklyn, having received a commission as Surgeon in the Mozart Regiment, Col. Riley, now stationed at Alexandria, has left for the scene of his labors.

Assistant Surgeon Samuel W. Crawford, one of the Fort Sumter heroes, has received the appointment of Major in the 18th Reg. of Infantry, U. S. Army, commission to date back to May 14.

A MEDICAL DIRECTOR TAKEN PRISONER.—We learn that Dr. CARRINGTON, at one time a practitioner of medicine in this city, but more recently Medical Director of the Rebel Army, under Gen. Garnett, in south-western Virginia, was taken prisoner on the defeat of this officer, and is now a prisoner at Beverly, Va.

SURGEONS OF THE FEDERAL ARMY PRISONERS AT RICHMOND.—The following is a list of Surgeons of the Union forces reported as prisoners:—BUXTON, BALL, DEGRAW, GRISWOLD, HARRIS, HOMISTON, LEWIS, MCLITCHIE, NORVAL, PEUGNET, SWIFT, STEWART, SWALM, POWELL.

Among the regulations promulgated for the organization of the troops under the new levy, is the following by authority of the Governor of New York, or Commander-in-chief: "The Surgeon and Assistant Surgeon will be appointed by the Commander-in-chief, after they shall have passed an examination by a commission prescribed by the medical department."

THE RESPONSIBILITIES OF THE ARMY SURGEON.

CAMP FEDERAL HILL, Baltimore, Aug. 8.

[Correspondence of the American Medical Times.]

THE military surgeon, called so frequently upon the field of battle to witness those heart-rending scenes, where his services can be of no avail in saving the lives of those brave men who have fallen fighting nobly, has, nevertheless, occasional opportunity of achieving for the beneficent art which he practises, some of its noblest triumphs: and it must ever be a source of professional pride and gratification to him, that these achievements, attained, as they not unfrequently are, under circumstances of the greatest difficulty, are *independent* of the result of conflicting armies. Sometimes where victory has been less gracious to the flag under which he rallies; and his green sash and yellow pennant have not saved him from the murderous fire of a relentless foe.

Every surgeon who has seen anything of service upon the field, must have felt with regret his inability to photograph the scenes a battle brings before him, and leave an accurate record of the many interesting cases brought under his observation, both on account of the benefit the profession at large would derive from such a record, and the interest with which it would be read by the families and friends of the wounded, in all ranks of life. But even camp life, with its never-ending duties and almost ceaseless activities, affords but little time or opportunity to record the more important facts elicited by observation, or write out theories, however interesting. In the army and in camp life if anywhere, *thought* finds its natural outlet in *action:* and *being* and *doing* take rightful precedence of *speculating* and *recording*, a characteristic everywhere peculiar to the American mind, and which defends the intellectual life of action from the contempt shown American literature by the scholarship of other nations more professedly literary. Here, cause and effect is studied in its largest broadest sense, as well as in minuteness and detail, and their teachings should be practised with that careful boldness and decision, which he will accomplish the most successfully, who, in addition to those qualities that make a good physician, is the most perfect master of the great general principles of the science of medicine.

At almost every step he takes he will find such knowledge indispensable; without books or a library to which he can refer for assistance, he must be his own counsellor. With limited means in new and anomalous circumstances, he will be called upon to produce great results. It will often tax his inventive faculties to their fullest extent to bore with the one *auger* that government furnishes him, the different sized holes the service requires. His prescriptions cannot be put up at "Hegeman's" or at Hazard & Caswell's, but he must be able and ready, if need be, to dispense medicines himself.

Though cautious, he must not be timid; though awake to sympathy, that he may gain the hearts and affections of all, he must be firm to have their respect and confidence, and unyielding in his decision, and possess that executive ability too rarely found in connexion with professional acquirements, which will enable him to have carried out effectually any course he may have decided upon as necessary for the good and welfare of those under his charge. While he is exacting of those under him in his department, and careful to see that every man is not only capable of filling his position, but if need be, one still higher, he should intrust no duty, however slight to others, which he himself should perform. Ever careful to maintain the dignity of his profession and position, by a true gentlemanly bearing and a high moral example, he will lose nothing worth retaining, by frequently visiting the soldiers in their quarters, mingling with them during hours of recreation, listening to their just complaints, instructing them in the laws of health, upon the intelligent understanding of which the efficiency of an army so much depends, and being at all times their counsellor, their guide, their friend.

Men of the medical profession! Our country is in the midst of the most momentous struggle which the history of nations has ever known. Half a million of patriots, hardly waiting for the call, have sprung into the ranks, astonishing the civilized world with an enthusiasm that thrills through every drop of blood and vibrates in every nerve fibre, and stand arrayed in defence of a government at once the most wise, the most liberal and just, the most beneficent ever framed for the benefit of man.

Their health, their lives have been confided to your care. To you they look for the alleviation of those sufferings which ever accompany the sad necessities of war. A trust so noble, so sacred, demands your most earnest efforts. The promptness with which you have responded to your country's call—the professional and domestic ties you have unhesitatingly sundered—the sacrifices you have so willingly made for the common cause, all speak in an unmistakeable language, how true and deep is your patriotism. Let it be equalled only by zeal in your profession, and excelled only in your recognition of, and devotion to the Supreme Being, to whom we owe every blessing, and who presides over the destinies of Nations. Men in other times whose hearts, burning with an unquenched desire for fame or professional zeal, to win by self-sacrifice and devotion to the relief of the sufferings of their fellow men, a grateful remembrance in their hearts as their only reward, have lived, grown old, and died with no such glorious opportunity—no such extended field of usefulness as now opens before you. The scroll of fame, upon which are written in letters of gold the names of Rush, Ramsey, and Warren, is again unrolled after four score years. You have but to

> "Act, act with the living present,
> Heart within and God o'er head."

You have but to do your part in this struggle in raising the world from the actual of imperfection to the ideal of perfection, to engrave your names in enduring letters upon it, and be held in living remembrance of millions yet unborn, whose faces you have helped to make happy with the glow of Liberty and the animation of Freedom.

RUFUS H. GILBERT,
Surgeon 5th Reg't N. Y. S. V., Advance Guard, Zouaves.

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BATTLE OF BULL RUN.

SANITARY CONDITION OF THE ARMY.

FORT ELLSWORTH, Virginia, *Aug.* 5, 1861.
[Correspondence of the AMERICAN MEDICAL TIMES.]

OUR regiment, the 17th New York Volunteers, were left at Fort Ellsworth when the army advanced on Tuesday to defend the fort, and to act as the rear-guard to the army. On Sunday, the 21st, the sound of the cannonade was distinctly heard from 7 A.M. to 7 P.M. We were encamped on the outside of the fort in a pleasant grove, and were congratulating ourselves with a speedy victory, and in the next advance to share its labors and responsibilities. The day was intensely hot, yet a steady breeze from the west tempered in some measure the scorching sun. Two of our field officers started early in the morning to witness the battle, not in the least doubting that before morning they would return with the news of a splendid victory. About sunset the last gun was heard, and silence reigned over that beautiful Sabbath eve. The moon shone calm and severe on the quiet scene, and all nature seemed hushed in silent beauty. Feeling a kind of vague uneasiness and some apprehensions that all had not gone well at the battle-field, I sat at my tent door enjoying the cool evening air and the serenity of the night. About midnight I heard the galloping of a horse along the road towards Alexandria. Soon three horsemen came up the road into our encampment, and inquired for the Colonel's tent. It was Gen. Runyon, and his aids, come to inform the Colonel that our troops were repulsed, and were in full retreat. It was expected that the enemy were following. Soon after this our two officers who went out in the morning, returned, and gave us their version of the retreat, but it seems they left early, and did not know the extent of the disaster. The Colonel had the troops quietly awaked, and removed into the fort, which was near at hand, but gave myself and two or three others the privilege to remain inside our tents. About two o'clock on Monday morning I threw myself on my bed, and slept until half past four. When I awoke the heavens were overcast with thick black clouds, and a cold, drizzling rain was falling. But the sight that met my eye as I looked towards the road beggars description. Far as the eye could see was one dense throng of flying fugitives. Baggage wagons, hospital ambulances, men on horseback, in some instances two and even three on the same horse, with both horses and men wounded. In some of the ambulances were wounded men lying on those who had expired on the route. Foot soldiers were toiling along without hats, caps, arms, or blankets; some limping along assisted by their comrades or alone, making the best time they could under the circumstances. Some of the men on horseback had been wounded, and the rain had moistened their wounds, and from their legs, feet, or hands, the bloody stream was dripping down to the ground. Many of the men told me the rain was quite a comfort to them, as it cooled their fevered wounds, and assisted in allaying the tormenting thirst which they mitigated by sucking their blankets and clothes. I will not attempt to give a catalogue of the wounded which I dressed and performed operations upon, as they were not of the most serious nature, but simply to show how men impelled by love of life, and stimulated by fear will perform feats, that are incredible to a man under ordinary circumstances. One man belonging to the Fire Zouaves, had a musket ball pass through one thigh, and nearly through the other, wounding the scrotum in its passage. I extracted the bullet by an incision on the outside of the thigh, the next morning. He had walked the whole distance within the twenty-four hours, and that too without very intense suffering. Another soldier, of a Brooklyn regiment, had a ball pass through the calves of both legs, and although the holes were large and ragged yet he performed the terrible march on foot, scarcely stopping to rest on the way. The distance these men travelled could not have been less than thirty miles, at times losing their way or to avoid the enemy.

One poor fellow had a musket or miniè ball passed through both cheeks, fracturing the lower jaw on each side and cutting the tongue nearly off. He came to my quarters at midnight, on Tuesday night after the battle. He could neither eat nor speak, but communicated in writing. He had walked from Bull Run, and had neither eaten nor drunk anything on the route, or on Sunday the day of the battle. I dressed his wound, removing loose splinters of bone, cleared his mouth of the foul blood and secretions, gave him a soft sponge to moisten his lips, and sent him on to Washington. A great proportion of the wounds which I saw here were in the lower extremities. A few in the arms and shoulders were found, but they were greatly disproportioned to those in the lower extremities.

Another feature I observed was that the wounds were very little inflamed, and neither became sloughy nor suppurated inordinately. This may have been from the perfect good health of the men and the abstinence from food and drink, or from mental and moral causes, which entirely absorbed their minds and faculties from the time of the injury to the period of convalescence. I never saw such a total disregard of physical pain. It was without an exception; all their faculties seemed absorbed in the flight and its results, all seemed conscious of having done their duty and having escaped the fate of hundreds of their comrades. An equal number of wounds of the same character in civil life, under the care of careful nurses and skilful surgeons, and with all the appliances of civilization and luxury, could scarcely have done as well. What then was the agency so powerfully sanative in these cases? It was not alone my observation in this respect. Many surgeons in the army verified the same, and all the accounts which we received from our wounded with the enemy confirm the results so far as can be ascertained.

One great fault, it appears to me, in our preparation for the battle was in not having supplies of refreshments, and especially water, a most important and indispensable article. The men went into battle without breakfast, and fought all day and retreated all night without food or drink. Water could and should have been furnished the men, and supplies placed at such points that it could have been easily given to them. It was more necessary than food. That can be dispensed with for several consecutive hours without material injury, but water, especially in hot weather and where great physical exertions are to be made, is one of the prime wants of the soldier. Rushing men into battle unprepared, and raw troops especially, who recently came from comfortable homes, and then after fighting all day and retreat all night, without food or water, was cruel and unpardonable. It might be argued that the repulse and retreat were unexpected, but it should not have been.

A repulse is often with the strongest army a matter of accident, and may be retrieved by skilful management; but a stampede, a rout, a panic, such as seized the late army at Bull Run, is a comparatively rare occurrence.

With regard to the sanitary condition of our army on the Potomac, up to this time, it is extremely favorable. The summer, up to the first week in August, has been cool, and attended with seasonable showers of rain. No long or protracted droughts or rain storms have occurred to render the weather of an unfavorable influence on the army. Diarrhœa of a simple form has been the most prevalent disease. Next to this, fevers of a simple miasmatic character, yielding readily to quinine. Colds, coughs, and mild rheumatic attacks, from exposure to wet and cold; carelessness in lying out of doors instead of a tent, as many soldiers do, will account for all this.

The colds and coughs rarely terminate in pneumonia, nor does the rheumatism often become acute. In enlisting men on so short a notice it is not surprising that a great number of men who are totally unfit for field service should have been enlisted, and by mustering into the U. S. service many will get into the army totally unfit for soldiers. The medical inspector looks at their legs, groins, and the general physical condition of the volunteer. But it is not to be expected that in half an hour's time devoted to seventy men the inspection will be very complete, and many defects are overlooked. Granting that the volunteer has none of the defects that disqualify him, such as varicose veins, hernia, tuberculosis, &c., he may have that about him that is worse than these. He may be lazy, dirty, indolent, inefficient, and morally unfit for the duties of a soldier. If the service requires him to do a certain amount of guard or picket duty he is sure to be on the sick list, and the surgeon who is humane and sympathetic will excuse him.

It is very difficult to get a good army out of the crude material you find in the city or country. They may fight if you put arms into their hands, but do not fight on military principles, and may or may not prove successful. Within two or three months of a volunteer's first campaign he is undergoing a sort of probation, and is liable to become home-sick or discouraged, and that completely destroys his efficiency. There have been a great many soldiers who were mustered into the U. S. service, as able-bodied and fit for military duty, that before one month had passed were found totally disqualified for service and were discharged. There are a certain number of volunteers that are not fit for soldiers, and the fact is not known until they are enlisted and tried.

I have written this much, which you are at liberty to publish, if you think it worthy of a place. If it is desirable I will also furnish you from time to time with articles for your Journal.

A. B. Shipman,
Med. Staff 17*th Regt. N. Y. V.*

VARIOLOID AT FORTRESS MONROE.

Roxbury, Mass., *Aug.* 7, 1861.
[To the Editor of the American Medical Times.]

Sir:—A writer in the Medical Times, for July 20, states that there have been no cases of variolous disease in the Department of Eastern Virginia. The object of such statement is to make it appear that no necessity existed for the inspection and vaccination of the troops at Newport News, by a person *not* of the army, which was ordered by Gen. Butler. Permit me to say, that in the office to which Dr. White is attached had lain, for many days before the date of his letter (July 12), a return from the post surgeon of Camp Butler, on which were reported five cases of small-pox. I would also state that he has quoted from that report in his letter; also that Dr. Eisenlord conversed with me about these cases, and Dr. Jaeck, his assistant, repeatedly accompanied me to visit them. I add a certificate from Prof. Sanborn, Post Surgeon of Camp Butler, which corroborates my statements, and would further refer to Dr. Sanborn's very instructive letter in the Medical Times for July 27, and Aug. 3.

(Copy.)

I hereby certify that in the month of June small-pox appeared in the 7th Regiment, N. Y., and continued at Newport News. Five cases in all were treated, one of them being nearly of the confluent variety. These cases were returned as such in the monthly return from the post for June, to Dr. Cuyler, Med. Director.

E. K. Sanborn,
July 28, 1861. Post Surgeon Newport News.

I refrain from comment, it can hardly be necessary.

Dr. White's letter refers to the General Hospital at Fortress Monroe, and the reader is left to infer that four gentlemen, of whom he is one, organized and have the entire charge of that institution. One of the gentlemen (Dr. Cuyler) has, in his character of Medical Director of the Department, an *ex officio* superintendence and control of this hospital, as indeed he has of those attached to the regiments also. He visits the General Hospital now and then, sometimes at intervals of ten days; as for the other individuals mentioned, they have practically *nothing* to do with its management.

No mention whatever is made by Dr. C. B. White of Dr. Gillman Kimball (formerly Prof. of Surgery at Pittsfield and elsewhere) and his assistants, Dr. Harwood and Mr. Francis, and still these gentlemen have the immediate and exclusive care of all the patients in the General Hospital, except some three or four men of the Naval Brigade, who, in a remote wing of the building, form or *formed* the entire charge of one of the gentlemen mentioned by Dr. C. B. White.

Dr. White mentions Dr. Cuyler as performing all the operations at the hospital. At the time I left Fortress Monroe (July 25) there had been three amputations performed there (all of the arm); two of these had been done by Dr. Kimball, the third, in his absence, by Dr. Cuyler. The only other operation worth mentioning was a successful explorative incision in search of a ball; this was also done by Dr. Kimball. Yours, &c.,

Henry A. Martin.

Correction.—Dr. James H. Thompson, of Orono, Penobscot co., Maine, writes under date of August 10th:—

"It was Wm. H. Allen, M.D., of Orono (not A. Allen, as stated), Surgeon to the Second Maine Regiment, Vol. who was taken prisoner at the battle of Bull Run. He could have escaped, but would not desert his post when his services were so urgently needed by the poor fellows who crowded the hospital, preferring, as he said, to 'stay with the boys.' May his reward be such as his bravery and the nobleness of his character deserve."

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VI.—Part I.

The Diseases of the Mouth, and their Relation to Dentition.—Stomatitis, and its different forms.—Glossitis.—Parotitis.—Differential Diagnosis in relation to Etiology.—Treatment without regard to Dentition.—Muguet.

No part of the infantile organism is more exposed to injurious influences than the mucous membrane of the mouth, nor is there any which is more frequently observed to suffer. Traumatic injuries are not frequent, except those sometimes produced by sharp margins of teeth irregularly shaped; the more frequent affections are those resulting either from chemical influences, or from an excessive degree of temperature. The mucous membrane of the mouth is very irritable, being accustomed only to amniotic liquor in fœtal life, and to milk in the early stage of extra-uterine existence. Every change in the diet, therefore, the bad quality of the maternal or artificial nipples, the use of candy, sucking bags, or alcoholic beverages, coffee, or stimulants of whatever kind, will act as irritants, producing hyperæmia or inflammation in a more or less severe form. It is by no means common to observe very severe forms of stomatitis after all such preceding causes; on the contrary, the large majority of cases, including those depending on primary acute catarrh of the stomach, and the raising of a large quantity of gastric acid, so frequent in infantile age, are very mild. Nor are some of the most severe forms of stomatitis in adults often found in early age. Thus it is a peculiar fact that the influence of the external and internal use of mercury has little influence on the mucous membrane of the mouth, or the salivary glands, in infantile life. Whatever the consequences of the administration of mercurial preparations may be, salivation, or even a mild form of erythematous stomatitis, is seldom observed; in a large number of adult patients there will perhaps none be found who will not suffer from a certain amount of mercury, but of infants and children of even more advanced age, those who show mercurial symptoms are exceptions to the rule.

There are a number of indirect influences also observed to produce the common, or erythematous form of stomatitis. It will often be seen in dependence on, or in connexion with traumatic injuries of the face, erysipelas, and hyperæmia and inflammation of the pharynx. It is further seen under the influence of many dyscrasic processes, as it is a very common symptom attending scarlatina, variola, morbilli, syphilis, and typhoid fever. It is frequently, as its causes will often continue or return, or be replaced by others, of long duration and obstinacy, like the pharyngeal hyperæmia and swelling in adults, and very generally proves a serious difficulty, although unattended by severe fever or deep-seated anatomical disorganization of any particular organ. Injection, swelling, high temperature, and slightly reddened color of the mucous membrane, copious or suppressed secretion, and pain on being touched, are the usual symptoms of the common form of erythematous stomatitis.

A more severe form is that known by the name of aphthous stomatitis. The superficial layers of the epithelium are not thrown off during the hyperæmic swelling of the mucous membrane, as in erythematous stomatitis, but a real and visible change takes place in the anatomical structure of the follicles. There is a circumscribed, punctated, vascular injection around a follicle, which is gradually infiltrated by exudation. The consecutive swelling increases in proportion, the follicles will burst and exhibit a superficial erosion, or ulceration, and the adjacent mucous membrane will be sympathetically affected. Some of these cases, which are by no means very frequent, look very much like the vesicles of labial herpes, with the only exception that they are less accumulated on a certain small locality; some may be explained by mechanical injuries, some cannot be explained at all. If it was not for those cases occurring in the first two months of life, so well described by Beduar, aphthous inflammation of the mouth would be a very rare disease; at all events the first stage will seldom come under observation, and usually the second stage, in which the vesicles are fully developed, is brought unto your notice.

That dentition, that is, the protrusion of teeth through the gums, can have nothing to do with this form of stomatitis, is manifest from the fact that it occurs mostly in the earliest period where teeth protrude in but very rare and exceptional cases; and that, whenever it is seen in advanced age, no connexion, either causal or as to time, can be found between the two. Much less can be said of all the forms of inflammation of the tongue known to be the consequences of caustic substances, combustion, or the poisonous stings of insects; this parenchymatous glossitis has not even been supposed by the most ardent advocates of the universal danger of dentition to be the result of its influence. Nor are the most severe forms of disease of the mouth attributed to dentition, like noma, or scurvy, or diphtheritic inflammation. They are, like the usual forms of stomacace, in which fibrinous exudations are deposed into the superficial layers of the mucous membrane, with an immediate tendency to gangrenous decomposition, well known to be not only the result of a local affection, but more so of a general decomposition of the blood. They are to be considered as the local symptoms of a general disease, the former being entirely subordinate; to say nothing of the age in which they occur by preference. Diphtheritic inflammation will occur in any age, but mostly between the first and third, at all events rarely before and during the protrusion of the first incisors; scurvy, noma, and stomacace are mostly seen in a somewhat advanced age, between the fourth and tenth years of life. In these, the local affection is something; but the larger amount of the symptoms and of danger depends on the general character of the disease.

There is another form of disease, on which nearly the same remarks may be made. Inflammation of the parotid gland, both idiopathic and symptomatic, is not a very uncommon disease, except in the age of dentition. Idiopathic parotitis will usually occur as an epidemic disease, in a similar manner as diseases of the larynx, or pneumonia, will appear as an epidemic, from some causes not perfectly understood, but depending on season and the constitution of the atmosphere; this idiopathic form is seldom seen both in the first year of life and in senile age. The symptomatic form, which will usually terminate in suppuration, and is observed in certain epidemics of typhoid fever, cholera, septicohæmia, and in some of variola, measles, dysentery, and pneumonia, is very rarely observed in small children; and therefore, among the causes of the above-named diseases, dentition is out of the question, with the exception, perhaps, of an occasional case of slight swelling of the parotid gland, brought on by the contiguity of the mucous membrane. I certainly do not deny the possibility of erythematous stomatitis occurring during the protrusion through abnormal gums, of perhaps an abnormal tooth, in an abnormal direction, and in an abnormally irritable child—one or more of these conditions being together, and therefore admit that a mild parotitis may sometimes occur in a causal connexion with dentition; but what I deny, and have attempted to prove by the illustration of the physiological process of dentition, is this, that diseases depending on this process are not the rules, but the exceptions. At all events, not even the slightest erythematous stomatitis must be permitted to go on the plea of dentition, unless there is a local hyperæmia of the gums, the seat of the supposed cause of disease, corresponding with the more general affection. I lay the more stress on this, as I believe I have shown by the numerous causes of stomatitis exhibited to you, that we need not be at a loss to find a cause in any given case, if we are competent to form a differential diagnosis. As long as there is certainty, we had better not resort to hypothesis or conjecture.

If a large number of cases of stomatitis was the result of dentition, why is it that a uniform mode of treatment, if any is resorted to, has not been accepted in these cases, relating to, and dependent on this cause? And why is it, that if any uniform treatment has been accepted, and is recommendable, it is just such as has no connexion whatever with dentition? And why further is it, that having no regard whatever to either teeth or gums, it is so uniformly successful? I speak of the chlorates of both potassa and soda, the effect of which in all these cases can no longer be doubted. It has long been a matter of difficulty after it had been largely introduced into practice, since the times of Hunt, West, Isambert, and others, to decide whether the effect was local or general. But the experiments of Gamberini and Semmola show, that the local effect of chlorate of potassa in mercurial stomatitis is very little, if any; but that the same remedy administered in sugar-coated pills, had a satisfactory effect. My own experience has led me to the same conviction, although, if any local effect is produced, it could be done by the chlorate being transmitted into and secreted by the saliva.

Another of those diseases often enumerated among the consequences of dentition is that sometimes called membranous stomatitis, now better known by the French name of "muguet."

Muguet is an affection which a few facts will prove to have not the slightest connexion with dentition. It has been generally observed in new-born infants, or in those but a few weeks old, but it is occasionally met with in more advanced life, even in adults suffering from exhausting and fatal diseases, towards the close of life. It is known by the occurrence of whitish or greyish, cream or cheeselike deposits of variable sizes, on the mucous membrane of the upper part of the digestive tract; they will be found on the lips, tongue, cheeks, pharynx, even in the larynx and œsophagus, but never in the stomach. One of its prominent symptoms, as described by adults, is a burning pain in the mouth, corresponding with the local affection; that infants suffer in a similar manner, is proved by their crying on being touched, and by their unwillingness to take the breast or swallow. Where no deposit happens to be seen, the mucous membrane appears injected, dry, and smooth, and but little mucus and saliva is secreted. In perhaps every case diarrhœa has been observed; so regularly indeed, that Vallaix speaks of diarrhœa as one of the common and almost pathognomonic symptoms of muguet. It is, however, probable, that its cause is to be sought for in the impaired digestion, want of mastication, absence of saliva, and affection of the mucous membrane generally.

The enumeration of a number of symptoms does not explain the nature of a morbid process, or a pathological deposit; and nothing but a description of the pultaceous deposits on the mucous membrane will illustrate the morbid change taking place in the mouth. They consist of the mucus of the lining membranes, of old and new epithelial cells, of fat globules, particles of food more or less decomposed, and finally, of microscopical fungous growths of different size, with sharp outlines and indentations, from which equally composed thalli will originate, to such a number sometimes as to form a network of dendritic parasitic tissue. The fungus was discovered by Robin, and called *oïdium albicans*, and has been described by Laycock, Gubler, and a host of other medical writers. It is not known in any form differing from that found in the mouth, and it is probable that it is, as such, contained in the air, and deposited at the entrance of the digestive organs; at least no other opportunity for its occurrence on the mucous membrane of the mouth is possible. It may be transmitted by the atmosphere, or transplanted from one individual to another by direct contact, by the use of the same spoon, etc. But it will not always develop itself with the same readiness, certain conditions being required. They depend on an acid condition of the mucous secretion of the mouth, a certain dryness and injection of the mucous membrane, feebleness of mastication, and easy access of air. It is important to observe, that the secretion (as far as it is kept up) of the mucous membrane of the mouth is acid instead of alkaline. It is very frequently found in infants whose mouths are not kept so clean as they ought to be, who are accustomed to sleep while, or immediately after, taking the breast, and retaining milk in their mouth, which soon is decomposed and acid. Muguet is therefore often found in foundling hospitals, where the inmates receive but little care, and uncleanliness is almost the general rule. Where proper cleanliness is strictly enforced, no muguet will appear, because no parasitic fungus is allowed to settle and form a crust of pultaceous matter. Thus pure water is both the best prophylactic and curative agent; the only thing worth adding is a small quantity of alkaline substance, chlorate of potassa or soda, carbonate of potassa or soda, biborate of soda or chloride of sodium. The mouth of every infant ought to be washed out after each meal, to be certain that no deposit remains on the mucous membrane. Where such has been the case, the local treatment alluded is perfectly sufficient. The deposit is found in the superficial layers of the epithelium; it seldom reaches the deeper ones, and scarcely ever implicates the lining membrane itself. Thus cleanliness will remove the affection; the surface sometimes bleeds when the deposit is rubbed off. The addition of sugar, rose-honey, or syrup, to the water (or weak alkaline solution), must be strictly avoided; these substances will adhere to the lining membrane and themselves undergo decomposition and prove a source of new difficulties.

The occurrence of muguet, then, is a mere accident, and has no intrinsic connexion either with a distinct morbid process, or with any certain period of early infantile development. It is no more characteristic of any constitutional disease, or general condition of the system, than tinea favosa on any part of the surface, which may be communicated from either man or animal, or scabies. You readily perceive that there is no shadow of a reason to search for any connecting link between the formation and protrusion of teeth and the accidental peculiar deposit on the mucous membrane of the mouth, called muguet, which years ago could be taken for a special kind of exudative stomatitis, but is now well understood.

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Boylston Medical Prize.—This prize, consisting of sixty dollars, or a gold medal of that value, has been awarded to R. M. Hodges, M.D., of Boston, for the best Essay on Excision of Joints.

Honorary.—The British Medical Association, at its recent session, elected as an honorary member, William A. Hammond, M.D., Professor of Anatomy and Physiology in the University of Maryland, and now of the United States Army. The honors of that Association are worthily bestowed.

Death of Lady Brodie.—The wife of the distinguished London surgeon, Sir B. Brodie, recently died at his country-seat. She was a lady of great benevolence.

New York Medical College and Charity Hospital.—Dr. E. Noeggerath has been called to the chair of Clinical Midwifery and Diseases of Females in this institution. A new chair, Ophthalmic and Aural Surgery, has been created, to which Dr. W. F. Holcomb of this city has been appointed.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,
OF NEW YORK.

No. III.

INDICATIONS FOR THEIR EMPLOYMENT.

I SHALL now treat of the *indications for the internal employment of Mineral Waters.*

Every man of experience knows too well how large a proportion of the cases he is daily called upon to prescribe for, are mere functional derangements, increased sensibilities, or results of loss of tone. The disordered condition may be an abundant source of annoyance and suffering to the patient, yet not have reached the dignity of nosological baptism. The physician hesitates between dietetic rules and positive medication; justly dreading the disturbing effects of the one, scarcely feeling confidence in the unaided powers of the other. Mineral waters have an exhaustless store of resources, including every variety of medicine that can be required, in elegant form, susceptible of the most exact graduation of dose, and of the nicest adaptation to the exigencies of each case; alterative, laxative, tonic, resolvent, deobstruent, in admirable combinations and almost endless variety; in states of solution grateful alike to palate and stomach; requiring no previous digestion to eliminate active principles—hence suited to the most delicate and irritable of constitutions; bearing, in the words of a modern writer, "the same relation to the ordinary remedies which food partially dissolved and liquid bears to the common products of cookery." It is astonishing how rapidly many of these derangements are relieved, and the patients restored to a sense of vigorous health, by a cautious use of such waters as the Franzensbrunn of Eger or the Kreuz of Marienbad, both containing sulphate, muriate, and carbonate of soda, iron, and manganese. They are mild, cooling, alterative, and chalybeate; and the former specially adapted for members of the learned professions and literary men, as requiring a less strict attention to dietetic rules than some others.

There is a class of very troublesome cases further removed from the standard of health, in which decided functional derangement calls for medical interference, yet none of the ordinary prescriptions succeed in giving relief, either failing to produce their accustomed effects, or doing so with so much disturbance as to make the remedy worse than the disease. Suppose the liver to be at fault, the common-salt waters, rich in chloride of magnesium, or the glauber-salt alkaline waters afford every hope of speedy benefit. Do you wish an efficient purgative cholagogue, the whole class of bitter or Epsom salt waters, as Saidschütz, Püllna, Friedrickshall, or best of all the Kissingen bitter-water, will be found efficient, and far more satisfactory in their operation than most of our ordinary prescriptions. The two former, in which sulphate predominates, are powerfully antiphlogistic; the latter, comparatively richer in chlorides, are less lowering, standing as it were half-way between the former and the more tonic saline waters. Where there is a high degree of irritability, what I may call the sedative action of some waters, especially the mild alkaline glauber-salt, is very remarkable. Of course this calmative effect is secondary, and due to the neutralizing of acid, the improvement of digestion, and the elimination of effete and offending material, whereby the quality of the fluids is improved, with a corresponding invigoration of the whole system.

It frequently happens that *iron* is plainly indicated, and yet that administer it in what form or combination we may, it disagrees, producing headache or general erethism; mineral waters offer us a variety of combination with chlorides, carbonates, or sulphates, with one or other of which we are almost sure to succeed. If the water does not agree when taken early in the morning fasting, it will often do so when administered after or even with meals. In the most striking case I can call to mind, where after a frightful hemorrhage accompanying a miscarriage, a lady, the daughter of a distinguished Western physician, remained apparently in a hopeless condition of anæmic debility, which resisted the most judicious treatment, the adoption of Pyrmont water as a common beverage at meals, flavored with the addition of a little sparkling Catawba, proved rapidly restorative, and the patient recovered vigorous health. Two others, each nursing their second children, subject to nursing sore mouth, and who made no progress under the use of the largest doses of the various chalybeate preparations which the stomach would bear, such as the citrate, ammonio-citrate, and lactate of iron, together with the most nourishing food, but remained feeble and chlorotic, were ordered a course of the same water taken early before breakfast, in the regular way. At the end of a week the improvement was manifest to the eye, and a month's use of the remedy sufficed to establish a condition of better health than either had enjoyed since the birth of her first child. These two cases also illustrate the well known *persistent effects* of this class of remedies in a remarkable manner; the next child borne by each, being larger and stronger than either of the two previously born, and during a protracted lactation, neither of the mothers was again afflicted with "stomatitis," but enjoyed good health.

Mineral waters are *peculiarly indicated* in the general or diathesic diseases, of which I will place *gout* and *rheumatism* first, for in no class have these agents a renown reaching so far back in antiquity, and contemporarary appreciation so complete and extensive. It is true that at most of the springs to which cases of these diseases are sent, bathing forms a main element in the treatment; but the advances of modern science enable us to build hopes of much success in the cure of rheumatism, and in the prophylaxis of gout, from the internal use of the waters alone. To fulfil the latter intention, a prolonged daily use of very moderate doses of a mild alkaline glauber-salt water, like Marienbad-Kreuzbrunn, has given me satisfaction; while in feebler subjects, and for prophylactic purposes especially, the common salt waters, rich in iron, are preferable. The stronger alkalines, as Vichy, have long been famous; and when abdominal plethora is marked, the hot, alkaline glauber-salt waters of Carlsbad are indicated. The daily use of one or two glasses of the latter, the first thing in the morning, for nearly three years, in a plethoric lady previously almost never free from gout or dyspepsia, seems to have eradicated the tendency to either, as she was not only free while regularly taking it, but having gradually left it off during the last two years, there has occurred no relapse.

In obscure attacks of probably rheumatic character, the powers of this water are so remarkable that I am constrained to be rather more diffuse in descanting upon them, out of pure gratitude, for benefits derived in my own case. Inheriting the gouty constitution for at least three previous generations from both parents, subject to chronic rheumatism from youth, and after the age of forty to that form of arthritis in the finger-joints, to which the term rheumatic gout is commonly applied, I wrenched my right shoulder by an awkward fall from the hayloft into my stable. After a few moments of pain, I was able to continue the carpenter work in which I had been engaged. Some time after, I noticed increasing difficulty in raising my arm or trying to pass the hand behind my back, together with a very severe pain on making any sudden jerking movement. An aching at night was next superadded, and to mend the matter an upset from my buggy wrenched the left shoulder, in which the same train of symptoms followed. The pain on getting warm in bed became intolerable, only to be partially overpowered by narcotics. The palsy of the arms increased till I was all but helpless, and could not lift a plate from the table with outstretched arm, though capable of bearing a considerable weight, as a bucket of water, for a few moments, when it hung straight down. Thus I suffered for a year in spite of all the treatment that judicious and kind medical friends could suggest, and my general health was rapidly giving way. I then bethought me, that were I in Europe, I would certainly try Carlsbad water, and constructed the proper apparatus for its production, and dispensing at the right temperature. The first days of May, 1856, I commenced the use of this water, and in a week was free of all pain; mobility of the shoulders was soon restored, and the painful swellings of the finger-joints were dispersed. The severity of the case may be judged of from the fact that it required a twelvemonth's time before the wasted muscles of the arms and shoulders recovered a tolerable share of their previous volume and power. A fellow practitioner in the same town, having had acute rheumatism, a painful chronic condition about the shoulders and back of the neck proved rebellious to all treatment employed: ten days' moderate use of Carlsbad gave perfect and permanent relief.

In old or anomalous forms of gout and rhematism, accompanied with cachexia, the iron waters proved very serviceable, such as Spa, Pyrmont, Driburg, or the mild chalybeate alkaline glauber-salt Eger; but if there remain sufficient vital energy, Carlsbad is unquestionably the remedy. Its use however requires great care, and in more irritable subjects, or where there is any tendency to hyperæmia, general or local, it is better to begin with the waters of the cooler springs, or to add Marienbad-Kreuz, so as to lower the temperature to 115° or 120° Fahr., which will secure a mild laxative effect; the proportion of such addition may then be gradually diminished and the temperature thereby elevated. Accident has taught me that a mixture of equal portions of Vichy and the Rakoczy of Kissingen affords the most resolvent and least debilitating form of mineral water medication for this class of cases, and worthy of extended trial.

OPERATION FOR THE

REMOVAL OF THE HEAD AND NECK OF THE OS FEMORIS,

IN A CASE OF MORBUS COXARIUS—CURE OF PATIENT.

By E. S. COOPER, A.M., M.D.,

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Master M. H., æt. thirteen, afflicted with hip-joint disease for four years, was brought to me in March, 1857. Six sinuses leading towards the joint were found; two terminating external to the trochanter major, and four considerably above, one near the crest of the ilium. But a probe could not be introduced so as to touch any portion of the diseased structures constituting the joint, though small portions of exfoliated bone had been thrown off through these sinuses at different times. The leg of the diseased side measured about two inches less in length than its fellow, and was only about one half its size. The leg was flexed and fixed in that condition.

Operation.—The patient was placed upon the right side (the left being the seat of disease), an incision was made nine inches long, extending from the orifice of the upper, to that of the lower sinus. The lower part of the incision was made directly in front of the trochanter major. The upper extremity was made to pass through parts of the gluteus maximus and medius muscles. Having exposed a portion of the trochanter major, a bone chisel was taken, and the soft parts removed from the bone, following it along from the greater trochanter to the inner extremity of the cervix of the femur and the margins of the acetabulum. The capsular ligament was nearly destroyed, but an adventitious formation, corresponding slightly to that tissue, was found connecting the internal extremity of the cervix of the femur to the margins of the cotyloid cavity. On pressing upon this structure, purulent matter was forced out through the openings made by the process of ulceration. After finding this state of the parts the joint was opened at once, and the true condition of the articulating faces revealed. The entire head of the os femoris was ulcerating, as was also the articulating face of the acetabulum. The head of the bone was therefore taken away, and likewise a small amount of the cervix. The major portion of the acetabulum was then removed with a bone chisel. The ligamentum teres had been destroyed by the process of ulceration.

The bony tissue being removed as mentioned, the wound was fully absterged and the parts examined, to see if any more diseased bone tissue requiring removal remained. None being found, the wound was dressed by applying a piece of lint, wet with an evaporating lotion, in the wound, one end of which was introduced into the acetabulum, filling the space previously occupied by bone. A roller was then applied, commencing at the toes of the limb of that side and continuing up and around the hips as tightly as the patient could conveniently bear it. This was wet with an evaporating lotion every two hours for ten days, when an aqueous solution of permanganate of potass (four grains to the ounce) was applied instead for a week longer, when the dressing was changed for the first time, a major portion of the lint being permitted to remain still in the wound. At the end of four weeks after the operation, the lint was removed from the wound, soap suds injected into the cavity, and the surfaces, whence the diseased bone was taken, examined. These were found covered with healthy granulations. A second piece of lint was loosely introduced into the wound, and the roller still applied as before. The amount of pain experienced by the patient on taking off and reapplying the roller was not very great, but sufficient to afford an objection to the frequent repetition of the change, and the roller was permitted to remain over two weeks at first without any change, partly for this reason, and partly because the proper adjustment of the roller is one of the most important features in the after treatment of this and similar cases. It is to the tightly adjusted roller that we owe the consolidation of the tissue and freedom against the burrowing of purulent matter, a condition so much to be dreaded; the bane in fact of this class of operations. The opening into the joint was made to heal by granulation entirely, but at no time was the granulating surface painful, or otherwise in an unhealthy condition. The patient had not an untoward symptom during convalescence, and at the end of six months from the period of the operation, was able to walk considerably, and constantly improved for five months more, when he was able to walk four miles a day with no other aid than a cane, the wound being at this time entirely cicatrized.

A CASE OF SUICIDE.

By H. M. PAINE, M.D.,

OF CLINTON, N. Y.

I was called in haste, about five o'clock Sabbath morning, May 6, 1860, to see Mr. Orvill Loomis, who had just committed suicide by cutting his throat with a razor. I found the body lying on the floor in a bedroom, at the foot of a bed on which his son was sleeping, and between it and the bureau, with his head towards and near to a low window. The foot of the bed and the bureau faced each other, and were four or five feet apart, with the window between them. His head was about one foot from the wall beneath the window—his left shoulder eighteen or twenty inches from the bureau, and his right the same distance from the bed—his body lying parallel with the face of the bureau and the foot-board of the bed.

The blood did not extend above his head. It extended on the left side of the body about one foot, and as far as the hips, and on the right side sixteen or eighteen inches, and nearly as far as the feet, though twenty or twenty-four inches from them. The blood that appeared to be arterial, was mostly clotted, of bright red color. The clots were chiefly found near the body, especially under the thorax. The quantity of blood was three or four quarts. The blood was spattered on the bureau in a space opposite the shoulders and extending up the bureau eight or ten inches from the floor, which, from their form, indicated that they were made by counter-spattering from the floor. There were no streaks of blood from them down to the edge of the bureau. The under edge of the bureau extended to within three or four inches of the floor, and under it were a pair of shoes, upon which were also spots of blood. There were no spots on the wall at his head, or anywhere on the bedstead, but some were noticed on the carpet a few inches beyond the portion saturated; nothing, however, which would indicate spurting of blood directly from the wound.

The cut commenced about half an inch below the lobe of the left ear, and extended transversely across the neck between the larynx and hyoid bone, to about the same point on the right side, severing all the tissues and blood-vessels, anterior to the vertebral column, which was exposed an inch in extent. The wound may have been made by one incision, although a cut upon the under surface of the hyoid bone may have required another stroke of the razor: whether there was more than one cut, I was unable to determine. He wore heavy whiskers, through which the cut extended for nearly its whole length. His countenance was pale and haggard, and eyes and mouth partly open. The body and limbs were flexible, and the position natural, the left arm lying by his side.

The razor with which the deed was committed was rather small in size, and was found grasped in his right hand underneath his body.

The deceased was about fifty years of age, of slender form, five feet six inches high, and of ordinary strength and activity. He was unquestionably insane, and had been for several months.

Oneida Co., N. Y., Aug. 1st, 1861.

NOTE TO SERVE IN THE HISTORY OF RHEUMATISM.

By DR. ALEXANDER MAYER.

[Translated by Dr. C. F. Deslandes.]

Nothing is more common in medical practice, than to meet, even after long experience, with facts which disprove established opinions, not based on actual cases, and which no received theory in science can explain. The perplexity experienced in such cases is really an intellectual torture, from which we instinctively try to escape, by interpreting in our own way the puzzling phenomenon, in order to adopt a treatment which may at least satisfy our reason. If we succeed in a cure of the case, we will at least momentarily forget it, unless a similar case forces it on our memory. But if it ends fatally, our conscience as physicians will keep a sad remembrance of it, a remembrance which nothing could henceforth efface; and if, later, some new specimen of the same disease offers itself to our observation, our mind, enlightened by an anterior failure, will lead us to adopt a line of conduct in harmony with the doctrine, true or false, which shall best explain to us the pathological enigma. Whatever may then happen, we have an imperative duty to fulfil; we must publish what we have seen, in order that others, adding their cases to ours, a mass of facts may at length be collected sufficient to lead to the description of a disease, which, on account of its variety, escaped until then the sagacity of the majority. Thus we will serve the interests of humanity and of science.

The disease in question is undoubtedly not new, but it is perhaps more frequent than formerly, if I may believe what I have heard lately about strange deaths following muscular pain, having its seat sometimes in the shoulder, sometimes in the lower extremities, at other times also, on any part of the body. By comparing those very sudden deaths, which nothing could lead us to anticipate, with the facts which we have witnessed with astonishment, I think myself authorized in referring them to the same cause; and in drawing the attention of my confrères to them, I am persuaded that I am doing a useful work, and my ambition does not go beyond that.

Three cases which have come under my observation, will serve as basis to the argument.

Case I.—N. M. was a very dear friend of mine, 43 years of age, emaciated, weak, and had for a long time been subject to gastric derangements, when, towards the end of September, 1859, he consulted me for a diarrhœa, which took away the remainder of his strength. He had just lost his situation, which secretly gave him much grief. After a careful examination, I came to the conclusion that my poor friend's life was threatened at its very source. He complained particularly of a sharp pain in the region of the heart, which caused him an inexpressible anxiety. He suffered at the same in the lumbar muscles. His appetite was completely gone. There was no fever. I should have remarked, that the winter before, the patient had kept his room more than a month, for muscular rheumatism, complicated with bronchitis and a most intense pleurodynia. I advised a treatment more hygienic than medicinal, intending to meet pressing indications as they would appear.

At the end of a few days, a terrible phenomenon made its appearance, the pain in the region of the kidneys increased, and retention of urine, which had lasted more than twenty-four hours, obliged me to use the catheter to empty the bladder. Nearly two quarts of urine were evacuated. The bladder ceased its function, and the fever was lit up. At the same time the rectum became paralysed, and the most active purgative could not rouse it into action, and soon the lower extremities became painful in their turn, so as to draw cries from the unfortunate patient. I had leeches applied at the lower part of the spine. A few hours after the patient wanted to get up to have his bed made, and his bloody clothes changed; but hardly was he in his arm-chair when syncope supervened, and he had only time to ask to be replaced in his bed. But already his speech was only an unintelligible stammering; he had lost consciousness, and the whole left side was hemiplegic. Sensibility was abolished on that side. I prescribed a second application of leeches in the form of a crown to the forehead, and to let the blood run for a long time; sinapisms were applied to the calves of the legs, calomel was given internally, all in vain; the disease ceased not to progress towards its foreseen termination, and my unfortunate friend died after one of the most terrible agonies I ever witnessed.

In my own mind, not yet enlightened by the facts which follow, and which I have since observed, I had to deal with acute myelitis—a rare affection, it is true, from a spontaneous cause. If I have ever had recourse more freely to the extracting of blood, and above all to phlebotomy, the use of which was perhaps indicated by my diagnosis, it was on account of the general condition of the patient, who had long been anæmic and debilitated. However, I have often asked myself what would have happened, had I been less timid.

I hope I shall be able to establish this retrospective diagnosis; muscular rheumatism having invaded the heart, and ending in cerebral apoplexy.

Case II.—Mme. D——, of Charonne, forty-five years old, plethoric, short, and rather corpulent, enjoying usually good health, sent for me, November 14, 1860; she had been suffering for a fortnight from an apparently slight disease.

Mme. D—— had a violent cough which fatigued her much, and which returned principally towards the evening, continued during the night, broke her sleep, and lasted still a part of the morning. Her expectoration was scanty and catarrhal. Auscultation revealed the vesicular murmur throughout the whole extent of the chest, with here and there some mucous and sibilant râles. No dyspnœa. The resonance, on percussion, was everywhere normal. In a word, the patient felt less anxious about her cold than about the sharp pains in the muscles of both her legs, and principally in the calves. Hence, the least movement was accompanied with pains, which could also be brought on by the touches alone. On the left side, the pain irradiated in the leg and simulated sciatic neuralgia by the course it followed. Moreover, there was no trace of fever either day or night. Little appetite, constipation.

I considered this case as muscular rheumatism, and did not hesitate in attributing also a rheumatismal character to the bronchial catarrh. I adopted therefore the simplest treatment—vapor baths, taken in bed, sedative embrocations on the legs enveloped in flannel, emollient drinks and douches containing opium, injections of oil, and suitable diet. Everything went on so exactly as I had anticipated, that on the 20th of November, that is, after six days of treatment, I ceased to visit Mme. D——, whom I looked upon as cured. However, on the 30th of November, I was again sent for, new symptoms having made their appearance simultaneously with the old* ones which had reappeared.

Thus, the catarrh and the rheumatic pains of the legs had forced Mme. D—— to take again to her bed; but she suffered greatly besides from an acute pain in the præcordial region, and an extreme uneasiness, the gravity of which she instinctively understood. The percussion and auscultation of the heart revealed no material lesion. I perceived very frequent palpitations, and such a change in the rhythm that sometimes the beating was truly tumultuous. Pulse from 110 to 114. Skin warm and covered with perspiration. At the same time the patient complained of a very intense cephalalgia, without any disturbance of the intellectual faculties. I was informed that Mme. D—— was a prey to profound grief, which she endeavored to hide from her attendants and those about her. I prescribed again the same remedies which had acted so well before, adding only the tincture of digitalis, *intus et loco dolenti;* but this time I was less fortunate than the first, and, until the 17th of December, I obtained but a feeble amelioration in the rheumatism of the extremities, and an improvement in the frequency of the heart's pulsations, which nevertheless remained quite irregular. I intended to have applied the next day a large blister on the region of the heart, when, during the night of the 17th to the 18th, an attack of apoplexy supervened, for which, as I lived at a distance, the attendance of a physician of the neighborhood was summoned. This confrère diagnosticated a rheumatism of the heart, and did not think it proper to bleed. He confined his treatment to leeches on the left side of the chest, evulsives on the legs, and a purgative injection. When I arrived on the following morning, I found her unconscious, with paralysis and insensibility of the left side and stertor. Two hours later she expired.

As has been seen, my diagnosis was not for a moment doubtful. It would indeed have been difficult not to recognise the rheumatic nature of the disease, and its extension to the chest, revealed by the nervous disturbance suddenly occurring in the functions of that organ. The cerebral apoplexy, as ultimate phenomenon, cannot either be contested in presence of the pathognomonic symptoms which I have described. So the morbid trilogy is here irrefutable; muscular rheumatism of the legs, its propagation to the heart, and lastly, fatal cerebral apoplexy.

Case III.—M. P——, merchant, æt. 54, of a nervous sanguine temperament, originally robust, but worn out by rheumatic pains of many years' standing, which attacked in preference the thoracic parietes and the loins, sent for me. *May* 22, 1861.—He complained of excruciating pains in the chest and back, which impeded so much his respiration that he was afraid to be choked; he tossed about excessively. Movements of the trunk drew cries from him; auscultation and percussion revealed absolutely nothing. The pulse was small and frequent, but the skin was not warm; no fever then. The urine, limpid and discolored, passed in great abundance. I was informed that Mr. P. was weighed down by deep grief, from considerable losses which he had just met. I prescribed an antispasmodic mixture, and yielded to the desire of the patient, who wished to go and take a Russian bath, because this remedy, which I many times had prescribed for him, had always relieved him. It was not so this time, for the next day I found Mr. P. nearly in the same state. I added to my prescription of the day before a liniment with a large dose of extract of belladonna, and a vapor bath to be taken in bed. The appetite was good, and I allowed him soups (potages).

24th.—Little change. The tongue was furred; there was nausea without vomiting; the urine was deeper colored. He had that morning a natural passage; an emetic, then an opiate, two grains of extr. gum. opii.

25th.—The vomited materials half-filled a basin; they were for the most part composed of bile and undigested food. There had been, at the same time, three passages from the bowels: the symptoms of the heart had increased. Mr. P. could move without uttering cries. Decubitus, dorsal. It was with difficulty that I succeeded in auscultating behind. It seemed to him, whilst he was held in a sitting posture, that a weight detached itself forward; that something broke loose in the chest. No abnormal sound was heard, either in the lungs or in the heart; only the pulsations were extremely frequent, but regular nevertheless. The heart had not increased in volume, and there was no indication of effusion in the pericardium; percussion was painful, but pressure on the different parts of the chest was now notably so.

During the day fever set on, and the head became heavy. The face and eyes were injected; the pulse strong and full, 120 to 124. I took from the arm sixteen ounces of blood, which covered itself with a rather thick buffy coat; the clot voluminous, swims in a small quantity of serum; absolute diet. I asked for a consultation. The confrère called in, recognised with me the rheumatic nature of the disease, but did not think the heart attacked. In his opinion, the intercostal muscles alone were the seat of the disease, and a few days would suffice to restore the patient. Here is the prescription:—dry cups on the region of the heart, a potion with the tinct. semin. colch. and frictions on the left side of the thorax, with a mixture of equal parts of tincture scillæ, tinct. digit., and tinct. semin. colch. The following days, and until the morning of the 28th, the patient improved; the muscular pains had almost disappeared, but the heart was still the seat of the phenomena described above, at a less degree however. For the first time, I considered myself authorized to desist a little from my prognosis. However, M. P. had the imprudence, in spite of his wife's entreaties, to go down to his store to transact some business, and then came back home. Everybody thought him well, or nearly so. I came in shortly after him and was the first to enter his bed-room, where I found him on the edge of his bed unconscious, paralysed, and insensible on the left side, and unable to answer distinctly my questions. His face was red, his pulse full and hard, and I could see from his persistence in carrying his hand to his forehead that he had pain there. I thought it right to draw from thirteen to fourteen ounces of blood from the arm, and I had two blisters applied on the thighs. But it was in vain; the symptoms became more and more serious. Consciousness returned only for some moments, during which the patient complained of sharp pains in the head, at one single spot situated to the right, above the eye. Then coma supervened, which abruptly ended in death.

Here the picture is much more clearly drawn than in the two other cases, and I need not insist on the diagnosis. As to the treatment, its failure will diminish the regrets which weighed on my conscience, by showing that general bleeding, which I had resorted to in the two preceding cases, from preconceived ideas, is quite as inefficacious in this disease to prevent death, as the other means which I had vainly used until then. Here I am in presence of a threefold problem which requires to be solved, and which I shall very summarily examine.

1st. Does muscular or nervous rheumatism enjoy, like articular rheumatism, the fatal privilege of invading the heart. In other words, is there a rheumatism of the heart having its seat in the very tissue of the viscera?

2d. Can we admit a relation of cause to effect, between muscular rheumatism of the heart and cerebral apoplexy, which, in the three cases I have reported, ended in death?

3d. Can the profound grief noticed in the three cases, be given as the exciting cause of the cerebral symptoms—what place must be assigned to them in the etiology of the disease?

Sec. I.—Every one knows that to Mr. Bouillaud belongs the honor of having been the first clearly to express the law of coincidence which connects acute articular rheumatism with the complications in the heart. But what I never found mentioned anywhere is, that it was in any way affected in muscular or nervous rheumatism. And, however, after all we know of the mobility of this affection, and if we consider that the heart is but a hollow muscle, what is there astonishing in this organ submitting to the influence of a morbific cause which respects no other part of the muscular system?

Do not believe, however, that I wish to establish any comparison between two diseases so radically distinct as articular rheumatism or better, *rheumatic fever*, and what is improperly called muscular or nervous rheumatism. However it be, whether there is or not any analogy between these two morbid entities, all I wish to prove is, that the heart is affected by muscular rheumatism, and that this affection in that organ manifests itself by symptoms *sui generis*, and is easily recognised.

Thus, in pericarditis or endocarditis, concomitant of rheumatic fever, auscultation and percussion reveal abnormal sounds, whilst, on the contrary, when muscular rheumatism affects the proper tissue of the heart, it gives rise only to functional disorders which manifest themselves by a more or less marked disturbance, general circulation, and innervation.

But what might be objected is, that my cases have no criterium, because they have not been completed by post-mortem examinations. I am sorry for this omission, which, in this case, is, however, less to be regretted than in many others, because it is well known that muscular rheumatism leaves no trace after death. It is not probable then, that any could be found in the heart rather than elsewhere. Since it is fully admitted that no trace is left in any part of the body, would it not be rash by induction alone to admit its existence in the heart?

After all, my purpose is to lead my confrères to make researches on a still obscure point of pathogony, and to induce those amongst them who are placed in more favorable circumstances, to complete this simple draught by microscopical investigation, which I have been unable to make?

Sec. II.—The three patients whose history I have related, died with all the symptoms of cerebral hemorrhage, such as, sudden loss of consciousness, persistent paralysis of motion and sensibility in one half of the body, &c., &c. Such is the simple fact, the chronological order in which the phenomena have followed each other; but what conclusions can we draw from this, without venturing into the fantastical regions of hypothesis? Must we see in these cases of death from the brain, but a portentous coincidence, or, on the contrary, must we connect the cerebral lesion with the disease of the heart, as a consequence of the profound disturbance which this latter causes in the two great functions of circulation and of innervation? I incline, I confess, to the last opinion; but I will not attempt to defend it against those who may refuse to accept it, because I could support it only by reasonings, and this kind of demonstration is not well received in these days.

Sec. III.—I shall only draw the attention of physicians on this remarkable peculiarity, that, in my three patients, a profound grief caused by reverses of fortune, embittered their existence, and had, to a certain extent, prepared beforehand the impending decrease of the nervous centres. We may easily conceive how such predisposition can favor the appearance of the more formidable symptoms, in an organ like the brain, when the heart, to which it is allied by so close a sympathy, is itself violently disturbed by the presence of rheumatism.

Now, it remains to be ascertained if, aside from the cerebral complications, the affection of the heart was sufficient to cause death. Future experience will answer.

I shall make no comments on the treatment. As has been seen, the results have been unfortunate in the three cases, although I did not obstinately follow the same tract. There is, however, a remedy which I shall no longer use in such case, not because I think it hurtful, but because I think it quite useless, and that is colchicum, which I consented to prescribe in deference for the skilful and conscientious confrère I had called in consultation, and who insisted on my using it. I persist more than ever in confining the indications for this previous remedy within the limits of articular rheumatism.

Sec. IV.—From all that precedes I may conclude, I think,

1st. That muscular rheumatism may consecutively attack the heart in the muscular element, and give rise to unnatural symptoms of excessive gravity.

2d. That this rheumatism of the heart differs from pericarditis and endocarditis concomitant of acute articular rheumatism; in auscultation revealing nothing abnormal, except palpitations, in presuming that they throw the patient into an inexpressible anguish.

3d. Lastly, that under the influence of deep grief, this affection of the heart predisposes probably to apoplexy by cerebral hemorrhage, which, in the cases observed by me, caused death.

Reports of Hospitals.

BELLEVUE HOSPITAL.

A Report of the Female Fever Wards of Bellevue Hospital, for June and July, 1861.

By ALFRED S. LOOMIS, M.D.,

Physician to the Hospital.

There have been received and treated in the female fever wards of the hospital, from the 1st of June to the 26th of July, twenty-one cases of fever, nine of which died. Two died a few hours after admission (in fact were dying when admitted), three within forty-eight hours, two on the third day, one on the fifth, and one on the seventh, after admission.

The days of the disease (as nearly as could be ascertained) on which the deaths occurred were, two on the fifth, one on the eighth, three on the ninth, one on the tenth, one on the twelfth, and one on the eighteenth.

Of the number treated, six were from Baxter street, three from Mulberry street, three from Mott street, the others from different localities in that vicinity. On investigation it was found, that since the 1st of April, at 87 Mulberry street, there have been sixteen cases of fever and five deaths. The first case was a child attending Pease's Mission school. At No. 90 Baxter street there have been four cases and two deaths. The first case was the child Julia Conway (a pupil of the Mission school), who was brought into the hospital in a dying condition. At No. 96 Baxter street there have been four cases and one death; the first occurring in a family that had formerly lived at No. 87 Mulberry street. At No. 2 Baxter street there have been seven cases and two deaths; the first case was the mother of a child attending the Mission school.

At No. 17 Mott street, six cases and one death in this house; the first case was a boy, a clerk in a store, at No. 89 Mulberry street. Rose Lane, admitted July 4th, residing at No. 163 East Thirty-sixth street, was a servant girl, who had friends in Mulberry street, whom she visited frequently, and some of whom had fever in June. Two cases were employees at the Mission-house. From further investigation, it is evident that this type of fever originated at the Mission-house, about the middle of February, the first case being Katy Way, a house child, who had been home on a visit a week before, to her friends in Hamilton street; but there is no evidence that she was exposed to any predisposing influence while on this visit. She was followed in about a week by Lillie Dale; and Dr. Joslin, who has charge of the Mission-house, states, that since that time he has treated about fifty cases in that institution. Previous to the appearance of the fever, the children had been remarkably free from disease.

All the patients admitted into the wards (as nearly as could be ascertained) were taken ill suddenly. The majority had had a well marked chill. Intense heat of skin was a prominent symptom in each case. In eleven, during the progress of the disease, one side of the thorax became markedly dull on percussion, fine crepitus being present, but no bronchial breathing or bronchophony, and at no autopsy was the second stage of pneumonia present. In all, at the outset of the disease, the tendency to stupor was strongly marked, the countenance assuming a dull livid hue; the eyes were vacant and suffused; the tongue in no case was heavily coated, but dry and red, from almost the commencement of the illness until convalescence was established, or death occurred. Diarrhœa, pain on pressure over the cœcum, tympanitis, and gurgling, were present in three cases only. Delirium appeared in twelve cases, and in five it was of an active character, attended in each case with sleeplessness, suddenly (in the fatal cases) passing into coma.

The eruption appeared early; in one case so early as the third day it was spread over the whole surface. At its first appearance it was of a dusky pink color, partially disappearing on pressure; in a day or two it became darker in hue, and remained unaltered by pressure. It was distinctly visible in each case, until convalescence was fully established, or death occurred; and was present at the time of the autopsy of those that died, disappearing slowly on those that recovered. There were three exceptions to this statement, in which a few spots only appeared on the chest and abdomen, of a bright rose color, readily disappearing on pressure, each of which recovered. Albuminurea was present in three cases, two of which died. In five of those that died, coma preceded death. Eight autopsies were made. There was a remarkable uniformity in the lesions of all those that died. In no case were there found any lesions of Peyer's patches, or special softening of the abdominal viscera. The lungs, in many cases, were intensely engorged, but crepitated under pressure and floated in water.

The only characteristic lesions were of the brain, the vessels of which, in every instance, were engorged, and there were from one to four ounces of serous effusion under the arachnoid. The substance of the brain was harder than natural, and the cut surfaces of the organ were studded by numerous bloody spots.

Of those that recovered, convalescence was established in some as early as the tenth day, in others as late as the twentieth. A daily record of each case was kept by the house physician, two of which, as prepared by Dr. Sundam, house physician, I add to the report.

Case 1.—Julia Conway, aged 48, native of Ireland, residence No. 90 Baxter street, admitted June 6th. (Her daughter, aged seven years, was admitted at the same time, in a state of collapse, and despite the free use of stimulants, died in a few hours; no autopsy.) Nothing could be learned concerning her case, except that she had been sick ten days. On admission she was delirious, her delirium being of a violent character, refusing to remain in bed, and shouting "murder" if touched. Pulse 103 and feeble; skin moist; anterior surface of the body covered with a mulberry colored eruption, slightly disappearing on pressure; tongue moist, and covered with a white fur.

Physical examination of thorax reveals marked dulness on percussion, with fine crepitus on the right side posteriorly. Ordered two grains sulph. quina every two hours, and all the nourishment patient can be made to take, and free use of stimulants. June 7th, 9 A.M.—Was restless during the night, sleeping not at all, requiring some one to be by her constantly to keep her in bed. Pulse 108 and full; tongue less coated and moist; skin dry; bowels have moved once freely; eruptions no longer changed by pressure, spread over the whole body, and assuming a darker hue. Still delirious. Respirations hurried. No change in physical examinations. Stimulus increased to ℥j. every two hours. 3 P.M.—Pulse 110 and feeble; surface covered with profuse perspiration; tongue becoming dry and red; delirium muttering in character. Stimulus increased to ℥j. every half hour. Blister applied to back of neck. 7 P.M.—Condition the same; still delirious, and now calls for her daughter, who came in with her, and died in a few hours. June 8th, 9 A.M.—Still delirious; pulse less rapid (100) and full. 8 P.M.—Called to her suddenly, and told she was dying; found her insensible; pupils contracted; surface cold, and covered with a clammy perspiration; pulse rapid and feeble. Learned that a few minutes previous, while lying quiet in bed, she had suddenly passed into this condition. Ordered sinapisms to the feet and legs, and additional stimulus, which, as she could not swallow, was administered per rectum. She remained in this condition until nearly 10 P.M., when she became conscious, and died at about eleven.

June 9th.—*Post-mortem Examination, Seventeen Hours after Death.*—Rigor mortis well marked; abdomen tympanitic; the spots of eruption present before death have now disappeared. Intestines healthy; no ulceration nor congestion. Spleen healthy. Kidneys slightly enlarged; capsules loosely adherent, intensely congested, filled with dark venous blood; slight fatty degeneration. Liver healthy. Lungs greatly engorged, especially on the right side, but crepitate under the finger, and float readily. Great engorgement of the superficial vessels of the brain; about three ounces sub-arachnoid effusion; as the knife passes through the brain, spots of blood follow it; no effusion of lymph. Substance of organ harder than natural.

Case 2.—Mary M——, aged 36, native of Ireland, residence 96 Baxter Street, admitted June 6th. Two days before she had been seized with a chill, pain in back and limbs, loss of appetite, etc., and had since been unable to leave her bed. On admission her face was flushed, skin hot, abdomen tympanitic, tongue slightly coated but moist, pulse 89 and full, mind clear, no eruption.

June 11th.—Since admission there has been no change in her symptoms worthy of note; until this morning an eruption has appeared over the anterior surface of the body, of a dusky pink color, slightly disappearing on pressure. Heat of skin increased. Pulse 100 per minute, and feeble. Tongue moist, but red at tip. Ordered ʒij. of whiskey every hour, with milk and beef tea. June 12th.—No change. June 13th.—Pulse 108; tongue still moist and red; face flushed; eruption darker in hue, not disappearing on pressure; no diarrhœa. Stimulus increased to ʒiij. every hour. June 14th.—Pulse 100 and feeble. Patient has slight cough. Physical examination of chest revealed marked dulness, with fine crepitus over lower lobe of right lung, posteriorly. No bronchial breathing. June 15th.—Face more flushed, eyes suffused, tongue disposed to be dry and red. Stimulus increased to ℥ss. every hour. June 16th.—Eruption has become dark purple in color, remains unaltered by pressure. Pulse 110 and feeble. Tongue slightly brown in centre. Stimulus increased to ʒiij. every half hour. June 17th.—No improvement. Countenance assuming a mahogany hue; patient delirious, delirium of a mild character; needs to be spoken to loudly, before she will answer. No cough or expectoration. Pulse 114. Tongue red and slightly dry, coated in the centre with a light brown fur. June 18th.—Delirium more decided; otherwise no perceptible change. June 19th.—Pulse 118 and feeble. Eruption unchanged in appearance. Dulness and crepitus less posteriorly. Stimulus increased to ʒvj. every half hour. June 20th.—No change. Still delirious. Ordered hair cut off. Cold applied to head, and blister to back of neck. June 21st.—Worse. Respiration labored. Pulse 120 and feeble. First sound of heart indistinct. Tongue dry and red. Skin intensely hot. Increased stimulus to ℥ss. every half hour. Turpentine stupes to chest. June 22d.—Respiration easier. Pulse almost imperceptible at wrist. Surface bathed in profuse perspiration. Lies almost unconscious. Stimulus same, with addition of ten grs. carb. ammonia every hour. June 22d.—Respiration easier. Pulse not improved. First sound of heart still indistinct. Lies almost unconscious. Vomits what she takes, especially the whiskey. Ordered acid hydrocyan. in one drop doses, and a mustard poultice over epigastrium. Whiskey ℥i. every fifteen minutes, with carb. ammon. gr. v. every hour. June 23d.—Better. Pulse stronger, and not as rapid. Vomiting arrested. Is more conscious than yesterday. Carb. ammon. gr. v. every two hours. June 24th.—Better. Pulse 108 and fuller. Seems to feel the effect of the stimulus. Decrease it to ℥i. every half hour. Eruption has entirely disappeared. June 25th.—Improving. More conscious of what takes place around her. Whiskey decreased to ℥ss. every half hour. While she was so very ill, the condition of the lungs could not be ascertained, but on examination to-day, nothing abnormal is noticed. July 1st.—Since last report, the patient has been steadily improving, and is now decidedly convalescent, and suffering only from the weakness consequent upon so long an illness. Her countenance has regained its natural expression, the mahogany hue it has worn so long having entirely disappeared; the heat of skin is gone, and her recovery is now delayed by profuse perspirations, which are, however, yielding to the use of acidulated washes. The stimulus has been decreased by degrees, and at present she only takes a spoonful occasionally through the day. During the whole of her illness her bowels have moved regularly every day, excepting the single attack of diarrhœa. July 22d.—Discharged well.

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The Great Mistake of Young Physicians.—For the most part, young medical men commit a great mistake on first starting. They overhouse themselves. Their establishment eats them up. They have not the courage to live in a small way. Then they marry too early. It is a virtue on their part, and speaks volumes in their favor. But house expenses are certain, and professional returns uncertain. Children must be fed; servants must be paid. The wife likes the habits of a lady, decorates her rooms, and receives her friends, while her husband lives in the streets, that he may sleep in a mansion. For a mansion it is to him, that vast pile of bricks and mortar, for which he pays an enormous rental, and which he has furnished beyond his need. For the sweets of life are unknown to him. He toils only for his daily bread. He has no time for visiting. He can never receive properly. His occupations unfit him for doing so. His real post, and the one in which he shines, is the sick chamber of the wealthy and the hovels of the poor. Beyond their precincts, he is nobody. How can it be otherwise? If he is a man of fashion, he is unfit for his profession; or, if he be a philosopher, he is unfit for fashion. Add to these eccentricities and burdens, an equipage—a shining, well-turned out equipage! This is the climax of folly that has brought many a general practitioner to the ground. It is time enough to ride in a carriage when you have realized capital, or should be lucky enough to possess some private means of your own. Only, private means alters the question, which, as we are now looking at it, is one of pure, unaided, professional ability.—*Medical Critic and Psych. Jour.*

American Medical Times.

SATURDAY, AUGUST 24, 1861.

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RECIPROCITY OF MEDICAL SERVICES BETWEEN THE STAFFS OF BELLIGERENTS.

At a recent meeting of the Surgical Section of the Academy of Medicine, held at the house of Prof. James R. Wood, a proposition was made to the effect, that steps should be taken with reference to a correct understanding with the profession at the South and the Medical Staff of the Southern Army, on the subject of a reciprocity of purely professional services. The proposition was made by a gentleman not a member of the Academy. It was not repeated in the form of a motion, and was dropped after considerable informal conversation.

The very great importance of the subject, and the facts and developments of the recent battles, justify us in bringing it again before the profession, and urging immediate and decided action. The country is on trial before the civilized world, and is rapidly creating the materials for future history. The present occasion offers an opportunity to inaugurate a new principle in the conduct of warfare, whether legitimate or rebellious, and to demonstrate our right to a place in the most advanced scale of civilization and humanity. The question is also one of immediate and pressing interest to ourselves, as well professional as general, and of vital importance to individual medical officers.

The character and position of the medical officer are not clearly defined, and his precise duties are not accurately designated. His mixed functions, combatant and professional, are not specified and distinguished; and the relations and obligations growing out of them, are not placed in such a clear and distinct light as to afford a principle from which a rule of action can be deduced with certainty to meet special exigencies. There is an apparent contradiction between the two powers, military and medical, and what has the aspect of inconsistency in claiming for him from his friends, the honors and rewards belonging to combatants, on the score of his being, in the true sense of the term, a combatant, and demanding, at the same time, the privileges and immunities from the enemy of a non-combatant. The function of combatant grows out of the circumstances under which the professional function is exercised. He is combatant in the sense that he contributes, by all the skill, knowledge, and zeal of which he is possessor, to promote the health and strength, and consequently military efficiency of the army he serves. He sustains and encourages soldiers by his presence on the field, and personally sharing their sufferings and dangers. He gives them the confidence, growing out of the certainty, that he will do everything which knowledge, prudence, charity, and coolness can do, to save their lives and limbs, and mitigate their pain if they are hurt; and by acting as aide-de-camp or commander, when accident or other circumstances render it necessary, he becomes occasionally a pure combatant. We base his claims for military honor and promotion for merit on these conditions, and on the fact that he is an officer and is stimulated and encouraged by the same distinctions, acknowledgments, and rewards, as other officers. We shall base the claim for exemption on the fact, that these are incidental functions growing out of his condition, and that his prime function is that of conservation, and that equally of foe as friend, with the single exception of priority of time. We are, ourselves, disposed to go still further, and make the preference for immediate attention depend on severity of injury, without distinction of friend or enemy. In the claim we intend to make, and the action we are urging on the profession, we only demand what we are willing in our turn to grant. We shall rest the claim on the principles of common humanity, and while entering our solemn protest against the most causeless, useless, cruel, and wicked conspiracy, since the days of Catiline (without, alas! a Cicero), we shall, at the same time, insist that the war, so far as our professional functions and appropriate duties extend, shall be conducted on humane, christian, and civilized principles; and that the profession, as the life conservator, shall address itself with common sentiments of public welfare to the great duty of mitigating its horrors, soothing its asperities, and perhaps thereby paving the way to reconciliation and reunion. In this aspect the profession will reassert its quality of non-combatant, and stand forth as the pacificator and the life conservator. The adoption of the principle of medical and surgical reciprocity will do much to remove the necessity which sometimes arises for the surgeon to act directly as a combatant; it will simplify battles by relieving the commanding generals and other officers of all personal care of the wounded, and will have a direct effect of rendering the appeal to arms more certain, forcible, and decisive. The proposition then which we make, and which we submit for agreement by convention (under protest), with the profession of the South, is the following:

That medical officers who are engaged in their legitimate duties, shall not be subject to attack or capture.

That after a retreat, the members of the Medical Staff of the retreating army, who may be detailed for the duty, shall remain behind without molestation, shall receive courtesy and protection, and be at liberty to retire when they see proper, or when the specific duty is discharged. That the severely wounded shall not be prisoners of war, but shall be at liberty to return to their own friends upon the pass of any surgeon of high rank.

That the wounded shall receive care and attention, according to severity of injury, by the surgeons of both armies respectively.

That the servants, horses, wagons, ambulances, and attendants necessary for the service specified, shall be respected.

That surgical instruments, medicines, dressings, and hospital stores, shall be free of transit, and shall not be subject to capture.

That every medical officer shall observe the same inviolable secresy as to the facts and information which come to his knowledge respecting the enemies' position, force, defences, designs, plans, etc., while in the performance of his professional duties within their lines or under their protection, which civil physicians observe in other respects in the relations of private life.

That every medical officer shall take an oath to that effect, and that any officer violating it be subject to perpetual infamy, and to be shot or hung.

That a medical officer exercising functions of combat or command, *and taken*, shall be subject to the same conditions as combatant officers, unless specially released for the performance of his appropriate and specific duties.

That the oath taken by all medical officers shall be tantamount in all cases, excepting the last, to a parole, but without conditions.

That medical officers may perform any professional duty for the sick and wounded of the enemy while within the lines, excepting such as tend directly to promote military strength and efficiency.

That it be *infamous* to question a medical officer respecting the condition, resources, etc., of the enemy.

That after a battle the Medical Staff of both armies shall have free access to the field, and be at liberty to cause the removal of any corpse, and to superintend the burial of the dead.

That permanent hospitals, with their staffs, attendants, and patients, shall be sacred, and open alike to friends and enemies; but that the government and administration of such a hospital shall remain in the hands of the occupant at the time of capture, unless superseded by special order.

That the hospital under such circumstances shall not be interfered with, excepting for a military necessity, and in that case all the sick shall be transferred to their own lines, if practicable.

That all men placed *hors de combat* are *ipso facto* released, and permitted to return to their homes.

We do not propose to enter into an elaborate argument in support of the foregoing propositions. We believe their intrinsic truth and justice will call forth a favorable response from the whole profession, and that the mutual advantages growing out of their acceptance will more than counterbalance any objections from a purely military point of view.

The direct result of their adoption will be to improve the moral tone of the war, and take from it the features which have characterized all former civil wars. It will infuse a chivalric sentiment into soldiers and officers, and by removing the temptation to cruelty and consequent retaliation, render it as far as possible a pure struggle of skill, science, courage, and devotion. The people of the South are poisoned by a sentiment of false patriotism, and misguided by a deadly political heresy. They are lifting suicidal and parricidal hands against the life of the nation and their own, under an insane delusion—the result of ignorance, passion, envy, and misapprehension. They have been hurried into their present attitude by conspirators and traitors, and have made a violent appeal from reason and guaranteed justice to arms and rebellion. The North is acting solely on the principle of self-preservation. The vital energy and inherent living principle of the Constitution is asserting itself. It is reason and justice struggling with insanity and passion. The South is acting consistently upon its false premises. That consistency, and the courage and self-sacrifice which sustain it, and which is risking everything for its support, merit and command even respect, while inspiring the deepest regret that such high qualities should be directed against the life of the nation, instead of the support of her honor, advancement, and supremacy. War has the direct effect of extinguishing personal animosities. Good soldiers in opposing armies speak respectfully of each other, and when not in arms are distinguished for mutual courtesy. War has its own laws, its virtues, its charities, and its aspects of refinement and civilization. Ancient history and poetry abound with illustrations of this truth. The age of chivalry, the nexus between ancient and modern civilization, changed the character of warfare, and introduced the Christian element, and established the doctrine that war is made for principles, not for hostility or aggrandizement alone. The present war is for the test and trial of our political principles. We should endeavor to make it one of principle alone, and eliminate as far as possible the personal element. We, who have unquestioned and unquestionable right, justice, law, and true public spirit on our side, need not fear to commit our cause to the legitimate operation of those principles. If the nation is true to itself it must triumph, and the Federal Union and the spirit of the Constitution be preserved and perpetuated.

We refer to these points, which are not our province to discuss, solely to establish the principle upon which we wish to base the proposed convention.

We recognise a similar sentiment in the South growing out of the appeal to arms. The war has produced numerous instances of the mutual respect and admiration which courage calls forth from enemies. The respect manifested for Major Anderson and the heroic garrison of Fort Sumter, the release of the captured surgeons, the care bestowed upon our wounded, and the episode of the gallant, high-minded, but misguided Lt.-Col. William Montgomery, Gardiner and his captors, prove our proposition, and give encouragement that the convention for reciprocity of services in the cause of humanity will be successful, and tend to shorten this unnatural struggle. Our policy should be the most resistless energy in the field, the most terrible and destructive force in battle, and the most boundless compassion and unlimited generosity to the enemy, *children of the country*, either wounded, captured, or conquered. We have adverted severely to the reported firing upon the *hospitals*. We cheerfully correct that statement, and withdraw our animadversions.

At one of the buildings used as a hospital the fire of the enemy was directed, and also at troops forming under its cover. Col. Gardiner, who was lying wounded and a prisoner in the neighborhood, directed one of his captors, John McCarty, of Fairfield, Ct., to raise a signal. He accordingly climbed, amidst a storm of shot and shell, to the top of an adjoining building, and hoisted his shirt upon a pole. As soon as the signal was recognised the firing ceased.

The Government cannot recognise or acknowledge the South as a *legitimate* belligerent, but its paternal character will appreciate and sustain any efforts made to economize life and mitigate suffering. It cannot act directly, but it can *allow* any agreement made between the profession North and South to have full efficacy. We presume, the commanding Generals of the opposing forces will cordially assent to the convention, which is for the mutual interest of both parties, and gives no advantage which it does not receive. The Sanitary Commission, which has already done so much to deserve the lasting gratitude of the country, and of humanity, should take the initiative in this important movement. It possesses the necessary organization and powers, and is of a mixed character, adapted to meet the mixed questions which demand discussion and settlement. It can either act independently as an authorized representative of the profession, or it can, in concert with the Academy and the Colleges, and State Societies, call a meeting of the profession. The shortest and simplest method will be the best, and the one most likely to be successful.

In addition to the movements we have recommended, we would suggest that steps be taken by the acknowledged representatives of the profession to call a convention of the profession throughout the world to meet at the World's Exhibition, to be held in London, to decide upon an international code, for the guidance and government of the medical staffs of all armies, and to promote reciprocity of service and freedom of action on the part of medical officers in all future wars. The result will be to diminish the calamities of war, to lessen the animosities which it engenders, and to eliminate the murderous element. It will improve the tone of the medical profession, and increase its influence. It will, if successfully inaugurated and carried out, be a distinct advance in civilization, and a powerful influence for the improvement and elevation of the human race.

THE WEEK.

The New York Medical Association for the supply of lint, bandages, etc., to the army, has presented its final report, and dissolved. This association was organized on the first commencement of hostilities, and was designed to assist in supplying the medical department of the army with such hospital stores as would enable it to meet the great emergency which was so suddenly created. The Association not only supplied these materials from its own resources, but it became the medium through which the various benevolent societies of the city transmitted their benefactions to the army. The report contains a carefully prepared detail of all the articles received, and the points to which they were distributed. The funds of the Society were obtained by subscription, and amounted to $1800; the estimated value of the articles issued was $11,548. The Association has answered an important purpose, and has earned the gratitude of the country. It is now dissolved, as the Medical Department of the Army is prepared to meet any present or prospective demands.

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We believe the regimental Surgeons of our volunteer army are not generally aware of their proper rank. For the most part they assume the rank and consequently dress of a Captain, when in truth they are entitled to that of Major. This error grows out of the fact that in the State service the rank of the Surgeon is that of Captain, but when mustered into the United States service the rank is changed to that of Major. It is important that the Surgeon should assume his proper rank, not only to maintain the dignity of his position, but to receive that deference to his authority which such rank alone gives him. We hope every Surgeon will act upon this hint, and take his proper position in the regimental staff, and demand a corresponding degree of authority.

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We have already alluded to the fact that our authorities have recognised female nurses in military hospitals, and provided for their payment. The following is the section of the Act recently passed by Congress, permitting their employment:—

Sec. 6. *And be it further enacted*, That in general or permanent hospitals female nurses may be substituted for soldiers, when, in the opinion of the surgeon-general or medical officer in charge, it is expedient to do so; the number of female nurses to be indicated by the surgeon-general or surgeon in charge of the hospital. The nurses so employed to receive forty cents a day and one ration in kind, or by commutation, in lieu of all emoluments except transportation in kind.

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The Act recently passed by Congress, "providing for the better organization of the military establishment," whereby any officer, after a service of forty years, or from any incapacity to perform the duties of his station, may be placed on "the retired list," contains the following section relative to the medical department:—

> Surgeons ranking with captains, are to receive thirteen hundred dollars.
>
> Surgeons ranking with commanders, eleven hundred dollars.
>
> Surgeons ranking with lieutenants, one thousand dollars.

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We think it is not generally known to surgical instrument makers in this country, that a Universal Exhibition is to be held at London, in 1862, at which special opportunities will be offered to these artisans for the exhibition of the products of their skill. Committees have been appointed on surgical instruments in France and England, which embrace some of the most prominent names in the medical profession. The following announcement has been made by the National Surgical Instrument Committee:—

> "They are prepared to receive and consider applications for space, and otherwise to co-operate with and facilitate the views of intending exhibitors in all parts of the country.
>
> "The action of the Committee extends, not merely to the advantageous exhibition of the ordinary trade productions, comprehended under the head 'Surgical Instruments,' but also of apparatus, appliances, and inventions of every description having relation to the science of medicine, or employed in the investigation and treatment of disease."

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The London medical journals are agitating the question of the right of members of the regular profession to consult with Homœopathists. Although the sentiment of the profession has been strongly pronounced against the practice, still it appears that some of the prominent members, who believe that they can defy established opinion, overstep the boundaries which have been made for the more humble, and gather the rich fruits of illegitimate practice. Mr. Fergusson has put forth the following defence, in which will be found an ingenious device for "bagging the game:"—

> "The fault of which I was accused three years ago, was that I had travelled in company with a Homœopath to relieve a gentleman of retention of urine, when the regular Surgeon in attendance had failed; and I was further accused of holding consultations with Homœopaths. The former charge I admitted, and the latter I distinctly denied. In addition I stated that 'I had no faith in Homœopathy,' and that 'I gave no encouragement to Homœopaths to consult me.' I added further that I never refused my Surgical services in any important case where they might be required, and would hold my conduct unjustifiable if any evil or fatal result ensued from negligence or refusal on my part. To all these views I hold as strongly now as I did at the time in question. I still do not consult with Homœopaths; I still have no faith in Homoœpathy, and I still give no encouragement to Homœopaths to consult me. I never intended, and do not wish now, to have or leave room for any quibble on these points. I have been told that to meet a Homœopath in any way in a case is to consult with him, and that, therefore, my denial is worthless; that such meeting amounts to a consultation. With those who take this view I at once plead guilty. I am occasionally consulted by Homœopaths (as I know other Surgeons are), and, hearing their history of the case in clearer terms than from the patient or a friend, I give my surgical opinion; with this the interview ends. From first to last there is not a word about Homœopathy introduced; but should there be, I invariably let the patient know that I have no faith in such doctrine, and that I am giving my opinion solely as a Surgeon. I am not aware that I have met with any man who has stronger views, prepossessions, or objections against Homœopathy than I have. No Homœopath can say that I ever conceded to him one tittle on Homœopathic principles; and as a public teacher of thirty-five years' standing, I appeal to my numerous pupils with the utmost confidence that they will free me from the imputation of having ever encouraged such doctrines."

Have we not a Fergusson among us?

Reviews.

Transactions of the Medical Society of the State of New York, for the year 1861. Albany, 1861, pp. 408.

The volume for this year contains an unusual variety of original matter. Though many of the papers contributed consisted only of the details of a case or two, most of these being, however, of much interest, there is still a full share of elaborately written articles by the leading members of the profession of the State.

The transactions open as usual with the address of the President, Dr. Daniel T. Jones, of Onondaga co. A melancholy interest is attached to this production, for in another part of the volume we find a biographical memoir of its author, by his friend and neighbor, the Hon. William Taylor, M.D. At the meeting of the Society, Feb. 5, Dr. Jones was in his usual health, and discharged the duties of presiding officer with great ability, and expressed himself highly gratified with the honor which his brethren had conferred by selecting him as their President. His address is a brief consideration of the position and obligations of our profession, and its progress in discovery. He mentioned the fact, that as early as 1828, he began to employ quinine in bilious remittent fevers, and in 1830, he took ten grain doses during an attack of congestive remittent fever, by advice of Dr. Day of Syracuse.

Dr. Jones was a native of Connecticut, and a pupil of Dr. Ives, of New Haven, where he attended one course of lectures. He received a license from the Connecticut State Medical Society, and soon after located in Onondaga county, New York. Here he became distinguished both as a physician and a citizen, having been chosen to represent that county two successive Congressional terms. He died March 29th, 1861, in the 60th year of his age.

Of the papers which make up the body of the work, we notice several with which our readers are familiar. Such are the articles on—1. Traumatic Tetanus, by Dr. McNulty, of New York; 2. Exsection of Vertebræ, by Dr. Hutchinson, of Brooklyn; 3. Suspended Animation, by Dr. Thomas, of New York; 4. Simple Extension in Treatment of Fractures, by Dr. Swinburne, of Albany; 5. Inversio Uteri, by Dr. Van Dyck, of Oswego; and 6. The Report on Medical Education, by Dr. Townsend, of Albany.

The remaining papers are numerous, but we shall notice briefly. Dr. Vanderpoel, of Albany, communicates two; 1. Use of Mercurials in Acute Pericarditis; 2. Bleeding in Cerebral Disease. Dr. V. does not advocate mercurials in *acute* pericarditis, for the reason that they neither tend to prevent effusion, nor promote absorption in the rheumatic as they do in the syphilitic diathesis. He advocates, on the contrary, stimulants, alkalies, and anodynes during the acute stage. According to the views of Bennett, from this statement, the reader is prepared to learn that the writer does not approve of blood-letting in cerebral diseases, except in rare cases. The views of Dr. V. are those which now generally prevail among the best practitioners, and are the results of the teachings of the school of which Todd was the head. There is, however, a faint reaction beginning to be perceptible, and depletion in cerebral diseases is again discussed. The careful discriminations which Dr. Vanderpoel makes of cerebral diseases, and the treatment which he advises, will lead to judicious practice.

Dermic Medication, by Dr. Bissell, of Utica, is a well written paper, in which the writer brings to our attention the importance of the skin as a medium of introducing remedies into the system. Dr. John G. Adams communicates a paper on the *Statistics of Suicide* in the *City of New York*, in 1859–60. The total number of suicides for that year was 56, being in the ratio of 1 to 386 of the mortality, and as 1 to 14,285 of the total mortality. The paper contains interesting statistics of suicides which are well worthy of record. Dr. Hall and Dr. Ferris furnish short articles on Diphtheria, which will, hereafter, be of service to the historian of our State Epidemics. Two cases of Poisoning by Corrosive Sublimate are reported; the first by Dr. Downs, of New York, and the second by Dr. G. Orton, of Binghampton, Broome co. The first case is not of special interest; the second was a case of suspected poisoning, and involved a post-mortem examination before a coroner's jury. Dr. Orton reports the results of the chemical examination to which he submitted the viscera. The presence of corrosive sublimate in large quantities was clearly demonstrated, but the jury decided that deceased came to her death "from a cause to them unknown." Dr. Orton calls attention to the presence of peculiar granules found beneath the peritoneal covering of the liver, which he regards as "minute hepatic calculi of peculiar constitution." The paper is accompanied by a finely executed lithographic illustration of these deposits. Dr. Finnell, of New York, reported a case of suicide, in which the victim plunged a knife into his neck so deeply as to penetrate the cervical vertebræ, but without wounding any important vessel. The circumstances, according to Dr. F., prove it to have been a case of suicide, but the nature of the wound is very unusual.

Prof. March reported a case of compound, comminuted, and complicated fracture of the leg, which proved fatal from delay in amputation. The chief interest in the case is the additional evidence which it affords, that a fracture complicated with the wound of the principal artery of the limb, generally indicates immediate amputation. Dr. Burge, of Brooklyn, presented a new and ingenious instrument for the dilatation of strictures of the urethra, to which we shall hereafter refer. Dr. Bly, of Rochester, has a short paper, in which he condemns Chopart's and Syme's amputation, the former owing to the bad stump, the latter on account of the difficulty of adapting an artificial foot.

Four cases of rupture of the uterus are reported, one by Dr. Barnett, of Windham Centre, and three by Dr. Fisher, of Sing Sing; all proved fatal. The first was complicated with an umbilical hernia in a state of gangrene. Dr. Fisher concludes from his cases that he should recommend gastrotomy, unless delivery could be readily effected. Dr. Dayton, of Mexico, reports a case of fibrous polypus of the uterus, which, protruding from the vagina, was removed by ligature; the patient died from anæmia. Dr. Skilton, of Troy, communicated a case of extra-uterine fœtation, with an illustration. Dr. Barrows, of Oneida co., reports a case of two pairs of twins born of the same mother within one year and five days. Dr. Hemstreet, of Herkimer co., reports a case of encysted tumor of pelvic origin. Dr. Purdy, of Madison co., gives a case of change of color following suppression of urine for a long period.

(*To be continued.*)

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Domestic Items.—Prof. B. R. Carman has resigned the chair of Materia Medica in the Medical Department of the University of the Pacific, and removed to Mexico. Dr. L. C. Lane, late of the U. S. Navy, has been appointed to the chair of Physiology in the same school.

Progress of Medical Science.

FRENCH MEDICAL INTELLIGENCE.

By Dr. Deslandes.

A lengthened discussion on *post mortem hysterotomy* has taken place in the Imperial Academy of Medicine of Paris, at its sitting of April and May, in which Messrs. Depaul, Devergie, Tardieu, Trébucher, et De Kergaradec, were prominently engaged. The questions to be settled were: 1st. That of the propriety of the operation in a purely medical point of view; and 2d, that of its admissibility by the law.

On the question of the propriety of the operation in a medical point, there could not be a doubt, and there was not the least hesitation. Whenever a pregnant woman dies near the end of her pregnancy, or at a period advanced enough to lead the physician to presume that the child is living and capable of extra-uterine life, the latter has the right, and it is his duty, to perform the cæsarean section, if there is no possibility of extracting the child through the natural passages.

M. Depaul has clearly explained the state of science on the two following points:—1. At what period of pregnancy is the fœtus viable or capable of extra-uterine life? 2. How long after the death of the mother, can the physician have ground for believing that the child is still living? The cæsarean section can only be performed with any chance of success as regards the preservation of the life of the child, from the 180th day of pregnancy, or at the end of the 6th month. He fixes one hour after the real death of the mother, as the time during which the child still contained in the womb may live.

Has not M. Depaul erred on this side of the possible, in giving to the physician but the latitude of a few minutes to act with a sure chance of success, and in fixing at one hour the extreme limit beyond which it would be useless to attempt the operation?

MM. Tardieu and Devergie have advanced the opinion that in following the precepts of science, and acting with the consent of the family, the physician had nothing to fear from the law.

M. Kergaradec considered the operation from a religious point of view.

After this discussion, the Academy limited itself to affirming that it is the duty of the physician to perform post-mortem hysterotomy in cases where there is a chance to extract a living child.

At a recent sitting of the Academy of Medicine, a report of great interest was presented by Mr. Robin.

To make, in our days, a discovery in the anatomy and physiology of circulation, is a very rare good fortune. Mr. Robin has not hesitated in acknowledging that this good fortune has fallen to Mr. Sucquet. In one of the most learned reports which the Academy has heard for a long time, Mr. Robin has shown that in his memoir on the circulation of the extremities and the head in man, Mr. Sucquet has discovered new anatomical facts which lead to unexpected physiological explanations and to pathological considerations of great interest.

The new anatomical and physiological fact discovered by Mr. Sucquet is the existence of a derivative circulation, which has its seat in the foot, the hand, and the face. By injections first, and then by dissections, Mr. Sucquet has demonstrated the direct and immediate passage of the blood from the arteries into the superficial veins of the foot and the face, a derivative circulation placed under the dependence of the heart, and evidently in relation with the activity of this organ—a truly new function, whose mechanism had escaped until now the anatomists and physiologists, and which explains admirably the turgescence and redness of the hand, the foot, and the face under the influence of heat, digestion, the use of alcoholic drinks, joy, anger, violent efforts, etc. etc. A circulation arrested by all depressing causes—hunger, misery, fright, cold, melancholy, etc.

Correspondence.

AUTHORITY OF MEDICAL MEN IN THE ARMY.

[To the Editor of the American Medical Times.]

Sir—Nothing can exceed the plainness and truthfulness of the propositions respecting the *status* of Doctors of Medicine in the army, stated in the last number of your journal. No one in his senses, who attends to the subject, can help perceiving that, precisely as on the one hand military men alone can appreciate and rightly understand the military details and operations of the service; so on the other medical men alone can rightly appreciate and direct its sanitary and therapeutical requisitions: and as the efficiency of the first is wholly constituted of his authority to command obedience, so is it equally essential that the second should be empowered to enforce obedience to those rules which skill and science dictate as indispensable to the preservation of life and health. Seeing this, it is of course further plain, that unless the medical man be empowered to enforce his knowledge, and authorized to exact obedience to his sanitary rules, his pains to preserve health and save life will always be ineffectual. Inasmuch as these rules form no part of military training, nor their observance any part of military discipline, it cannot in reason be denied that they constitute a distinct sphere on which the medical man alone is qualified to direct and control. There is no valid objection why the medical man within the limits of this sphere should not be empowered to enforce obedience to his sanitary regulations. If this authority be not granted to him, of course these rules will not be either heeded or obeyed any more than the military regulations of the service would be if the commander of the forces were not empowered to enforce their observance. Nor is there the least real ground for the supposition that the exercise of this authority by the medical corps will ever be an intervention in military discipline, or to the highest extent invalidate the military authority. No one can truthfully affirm that it would even derogate in the least from the real or fancied dignity of that authority. On the contrary, its existence would, by maintaining the physical *tone* and heartful spirit of the men, contribute to military discipline and promote soldierly qualities. Suppose we required the colonel of a regiment to see to the regulation of all the sanitary concerns of his command, he would at once decline the duty as one out of his sphere, simply because, however profoundly he may be impressed with the necessities of the case, his studies have not qualified him for the business in question. But this is precisely what the studies and experience of the medical man have qualified him for, and it is therefore in this sphere he is qualified to command; that he is not authorized to do this in every army, is one amongst the many anomalies of life which refuse to give any *explanation* to the inquest of reason. Now, since the qualifications to cope with the difficulties of both these spheres (military and medical), and to perform the duties of each of them, cannot be combined in one person, and yet seeing that they equally require authority to exact their fulfilment by the soldier, we are shut up to the conclusion, that if the army is to have any sanitary regulations the power to exact them must be granted to the medical corps. In a word, their acts should be "by order," similarly as those of the colonel or commander are. Of course we do not mean that aught arbitrary should pertain to their station, but that they should be subject to the same code of duties, and held in their spheres to responsibilities similar to those of the military officers. As circumstances now are, the position of the medical officer is so humiliating to even the most docile and tame-spirited that few, if any, competent, will station themselves in it, however much they may desire it. When in the camp the medical officer is habitually in the presence of practices ruinous to health which he is unauthorized to abate; and even his suggestions to that effect to those *in command*, are expected to be made in a spirit of deference which rather *deprecates* than urges attention; and he is attended to, if at all, as one to be *tolerated* rather than heeded. What candid person can help confessing that all this is precisely as it should *not* be; and if the next step in viewing the subject be taken, to join in soliciting that a change be made. What this change should be, you have very ably represented in your article, to which I referred in the beginning. And I trust that a requisition will be made upon the government to that effect. The time is auspicious.

Yours, &c. Rufus K. Browne, M.D.

New York, Aug. 12,
27 Bond street.

FOREIGN CORRESPONDENCE.

[Letter from David P. Smith, M.D.]

PARIS.

Having found it very difficult to obtain much information concerning the peculiar advantages of Paris for professional study, before I went there, I have thought that perhaps it might be well for me to give in a few words a little resumé of what can be there followed to advantage. In the first place, unless one is a very good French scholar, it is hardly profitable to spend every morning in visiting the various hospitals. The crowd at these morning visits is so very great that little can be learned except by the eye. However, the running visits—cliniques—of Nelaton, Jobert, Civiale, and Trousseau, should be attended. Too much cannot be said in praise of the immense clinical advantages enjoyed by those who avail themselves of the private clinical instruction of the internes or chefs de clinique of the various hospitals. Here the fee demanded keeps the classes very small, and you have an immense field for observation. I shall never cease to recollect with pleasure the two hours spent every evening in the wards of La Pitiè, for two and half months, under the able guidance of M. Dumont. Although the French treatment of many diseases is decidedly contrary to our American ideas, the immense variety of cases shown, and the opportunity of seeing the result of treatment bad or good, must be useful to any one. It is, however, safer for a man who has seen some practice, than for a mere student, to view their practice. The practitioner is not so ready to embrace pernicious doctrines. The clinique of M. Sichel, which is held every Monday and Thursday, presents a great variety of eye disease, and must be very useful in familiarizing one with all forms of diseased vision. But it is in the facilities for the study of anatomy and the surgical operations that Paris excels all other medical centres. Owing to the peculiar social relations of a great mass of the population the supply of anatomical material is almost unlimited. Many English annually visit Paris for the express purpose of practising the operations on the dead body. For the benefit of any one who may feel interested, I will jot down my course there in that respect in detail. I went to the anatomical rooms at Clamart, which is a little out of the centre of Paris. The rooms are under the management of MM. Rambaud and Bastien. As I was recommended to engage with M. Rambaud by several English, I did so. He speaks English, and is a very painstaking, careful teacher. By the payment of two fees of one hundred francs each, that is of forty dollars in all, I obtained all the material I wanted for two and a half months constant work; some days being eight hours in the rooms. The great profusion of subjects renders any economy in their use of no consequence, so that the same operation may be repeated over and over an immense number of times; in this way enabling any one to acquire certainty and dexterity, if he devotes sufficient time to it.

I observe that I have omitted to mention a clinique of Chassaignac's that I attended shortly before I left Paris, when I saw him perform the infrequent operation of amputation at the hip-joint. It was done upon a lad of about fifteen years for compound fracture of femur, which had taken on unhealthy action and was exhausting the patient by immense suppuration. The femoral artery was controlled by pressure, and so little hæmorrhage was there that the anterior flap did not require to be grasped as recommended. Not more than four or five ounces of blood were lost. There was great prostration immediately after the ablation of the limb, but he soon rallied, and was conveyed to bed in a very comfortable state. After much practice of this operation upon the cadaver I find it is most readily accomplished by first making a very long and broad anterior flap by transfixion; then, by one cut from heel to point of the knife, dividing the capsular ligament; then one cut divides the ligamentum teres, and enables you to complete the operation by cutting straight down through the adductor and glutei muscles. The universal mistake in the dissecting room was the endeavoring to scoop out the head of the femur. One straight cut, as if you aimed to cut off the head of the bone, allows it to immediately start from the socket.

Army Medical Intelligence.

Brigade Surgeons.—The list of appointments of Brigade Surgeons. under the recent Act of Congress, has not been published. The following gentlemen have been reported as appointed:—G. H. Lyman, Mass.; F. H. Hamilton, N. Y.; H. S. Hewit, N. Y.; J. C. Dalton, Jr., N. Y.; Luther V. Bell, Mass.; Geo. Suckley, N. Y.; Henry Bryant, Mass.; Wm. H. Church, N. Y., Peter Pineo, Mass.; O. Martin, Mass.

Resignations of Surgeons in the Volunteer Regiments.—J. H. Thompson, Mozart Reg., N. Y.; C. McDermott. 2d Ohio; H. H. Mitchell. 11th N. Y.; A. Majer, Garibaldi Guard, N. Y.; J. S. Van Ingen, 10th N. Y. V.

Candidates passed by the Army Medical Board.—The following is the relative merit roll of approved candidates examined by the Army Medical Board to July 16, inclusive:—1, Joseph Januier Woodward, Philadelphia, Pa.; 2, Edward Swift Dunster, New York City; 3, Elias Joseph Marsh, Elisabeth, New Jersey, Third Regiment New Jersey Volunteers; 4, Robt. Fulton Weir, New York City, Twelfth Regiment Volunteers; 5, Thos. Chalmers Brainard, Philadelphia, Pa.; 6, Morris Joseph Asch, Philadelphia; 7, Henry Sailor Schell, Philadelphia; 8, Charles Knickerbocker Fenne, Buffalo, N. Y.; 9, Joseph Engles Semple, New York City; 10, William Henry Forwood, Chester, Pa.; 11, James Henry Pooley, Dobbs Ferry, N. Y.; 12, Ely McClellan, Philadelphia; 13, Charles Archibald McCall, Philadelphia; 14, Samuel Appleton Storrow, Washington, D. C.; 15, John Chamberlain Clark Downing, Georgetown, D. C.; 16, Wm. Dilts Wolverton, Stockton, N. J.; 17, Jas. Forest Kenedy, Iowa; 18, John Joseph Butler, Washington; 19, Wm. Richardson Ramsey, Norristown, Pa.; 20, Thomas Henry Pelsby, Baltimore, Md.; 21, Albert Hartsuff, Unadilla, Mich.; 22, Charles Ravencroft Greenleaf, Ohio; 23, Grove Spooner Beardsley, declined appointment, Oneida, N. Y.; 24, Philip Adolphus, Baltimore, Md.; 25, Andrew James Baxter, Cincinnati, Ohio; 26, Bolivar Knickerbocker, Philadelphia; 27, Lewis Mathew Eastman, Baltimore, Md.; 28, Johnson Van Dyke Middleton, Baltimore, Md.; 29, William Thompson, Philadelphia.

Surgeons for the Illinois Volunteers.—The Board of Medical Examiners for this State, Prof. H. A. Johnson, M.D., President, have passed twenty-three *Surgeons*, as follows: Drs. W. Wagner, Geo. Coatsworth, H. Wardner, T. W. Winer, A. W. Heise, Jas. Bringhurst, C. Goodbrake, L. D. Kellogg, Wm. J. McKim, Henry Parker, Charles Storch, W. R. Burke, R. L. Metcalf, S. T. Trowbridge, W. M. Gray, R. G. Bogue, G. S. Lucas, L. Watson, S. C. Blake, S. M. Hamilton, S. W. Everett, Jas. Roberts, and J. W. Tuttle. *Assistant Surgeons*, as follows: Drs. T. Babb, John Fetzer, F. K. Bailey, A. Blake, Carl Muntz, J. S. Hunt, S. C. Plummer, George H. Dewey, P. H. Bailhache, Sanford Bell, Chas. Davis, O. G. Hunt, D. Stahl, Jas. Hamilton, H. A. Buck, Edwin Gaylord, John B. Ensey, Jas. Farnum, E. Gulich, Benj. F. Stevenson, O. B. Ormsby, C. B. Tompkins, John M. Phipps, Wm. F. Cady, Theodore Bluthardt.

Second Michigan Regiment.—Henry F. Lyster, A.M., M.D., is Surgeon to this regiment, instead of Nathan Webb, as formerly announced.

Naval Appointment.—We learn that Heber Smith, M.D., formerly Surgeon of the Gunboat Monticello, and who was severely wounded on the Rappahannock, has been commissioned as Assistant Surgeon in the Navy.

General Hospital, Fortress Monroe.—We learn that Dr. Kimball is about to retire from this Institution, which will now come under the entire charge of Dr. Cuyler, the Medical Director of this Department. Our readers are aware that there has been much complaint about the management of this hospital while under Dr. Kimball. It is but justice to Dr. Cuyler to state, that during the time he had no part in the administration of the internal affairs of this hospital.

A correspondent, writing under date of August 16th, says:—"Dr. Cuyler proposes to prepare a reading-room in the General Hospital, which will contain also a library of such books as will be of interest to medical men in our situation, and to which all the surgeons in this division of the Army may have access at any time. I shall then propose that we organize a Medical Society, which would have for its object the reading of papers, and the discussion of subjects pertaining to Military Surgery, Diseases, and Hygiene, to be called The Union Volunteer Medical Society of Old Point Comfort." We are glad to hear of this proposition to form medical societies among the surgeons of the army. We have already suggested their importance, and we hope to hear of many such organizations for mutual improvement.

THE ARMY HOSPITALS IN WASHINGTON AND ITS VICINITY.

Washington, Aug. 17, 1861.

The Washington Infirmary; Columbian Hospital; Military Hospital in C St., for Regulars; Union Hotel Hospital, Georgetown; Seminary Hospital; Military Hospital at Alexandria, etc., etc.

[Army Correspondence of the American Medical Times.]

The sanitary condition of the Federal City and the vast military encampments in its vicinity, has become second in importance and interest only to the question of the military defence of the city; and it will be fortunate if the military authorities appreciate the intimate relation of physical health and military strength. The fact that military authority and extra municipal sanitary surveillance must combine for the protection of the sanitary safety of the Capital, has long been too obvious. And there is evidence that this fact is appreciated, for while visiting the rooms of the Sanitary Commission a few mornings since, a messenger from the mayor's office called to ask if that Commission would aid his honor in procuring the removal of a number of dead horses from an open lot towards the Columbian Hospital. An affirmative reply was promptly given, and a request immediately dispatched to the proper military authority. A similar request on the previous day had cleared from a sunken lot within sight of the President's mansion, thirteen equine carcases.

But reserving for a future letter my notes on the medical topography and sanitary peculiarities of Washington and the banks of the Potomac, I will now give a brief sketch of the hospitals in Washington and its vicinity.

Let it be stated, *in limine*, that previous to the month of May last, a military hospital had not been thought of at the Capital; and the first order upon the purveyor's department for medical and surgical supplies for military forces, created an interesting epoch in the history of the Medical Bureau of the Army. Whatever now exists in the nature of hospitals, and a preparation for wounds and sickness, has been hastily extemporized.

The Washington Infirmary.—This institution has been established for several years, as a hospital for strangers and for homeless persons. The Sisters of Mercy, under the direction of Professors in the Medical College, have had charge of the hospital. The sisters continue their faithful attendance under the military administration, and although a few beds are still retained for civilians, they have wisely established a separate and independent institution in a remote part of the city. This infirmary can accommodate one hundred and eighty patients, the number seen at my last visit. Its location, though in an open and pleasant section of the city, on E Street, is rendered insalubrious by stables and refuse in front, and by sunken lots and a slimy pond in the rear. Congress has appropriated $5,000 for the drainage of the hospital grounds. Drs. White, Gouley, Butler, and their assistants, constitute the medical staff, and their patients appear to be doing well. Erysipelas has made its appearance in a few cases, and typhoid fever surely will appear if the drainage is not soon attended to. The edifice having originally been a penitentiary, its ventilation and appointments are not all that could be desired for a hospital.

The Columbian Hospital.—This is an old five-story brick structure, in the form of a parallelogram, with halls bisecting each story longitudinally. Erected and always used for collegiate purposes, its apartments small, and having no water supply or sewerage, the perfect cleanliness and purity of the wards pleasantly impress the visitor with the efficiency of Dr. Abadie's administration, and the faithfulness of his well trained women nurses, from the Relief Association of your city. This hospital is located on the summit of Meridian Hill, on Fourteenth street, two miles north of the Treasury Building. It now contains nearly two hundred and fifty patients, with a smaller percentage of surgical cases than the other hospitals. Its chief physician, Abadie, is assisted by Drs. Asch, Brainard, Adolphus, and Knickerbocker. Ten lady nurses and an insufficient number of assistants, give such attention to the nursing as might profitably be emulated in our best civil hospitals. The absence of water in and about this hospital is a deplorable defect, and Dr. Abadie is taxing his ingenuity to supply the defect from his single well, by means of a forcing pump and an elevated reservoir. We agree with him in the opinion that such buildings should not be selected for hospitals, if more appropriate structures could be provided. But we think the Quartermaster-general, whose duty it is to provide the hospitals, has done wisely in thus selecting an elevated and thoroughly ventilated locality for the largest hospital; and we venture to believe that his large and liberal views of official duty will yet prompt him to devise liberal plans and greatly improved structures for hospitals.

The C St. Hospital for Regulars.—A couple of dwelling-houses in the rear of the National Hotel, are in use as a hospital, under the care of Dr. ———. Both houses were crowded at the time of my visit, containing seventy-eight patients, mostly surgical cases. Several cases possessed peculiar interest. One athletic artilleryman presented an excellent stump, from an amputation performed under fire on the field by Dr. Peugnet. He was doing well, after having walked the entire distance—nearly forty miles—to Washington, immediately after the amputation. Erysipelas has since appeared in the hospital, and this heroic fellow is reported as one of its victims. The location of this hospital is damp, unventilated, and imperfectly drained. The people of Washington seem ignorant of the fact that Pennsylvania Avenue, from the Capitol gate to Willard's, was a marsh, and that its effectual drainage is still prevented by the tides of the Potomac. It is fervently to be hoped that the Hospital in C street may soon find a more salubrious location.

The Union Hotel Hospital, Georgetown.—This was the first hospital called into existence after the Infirmary was occupied by military patients. It was an old tumble-down hotel, situated in the low eastern section of the town, and consisting of a main building fronting the south, and two wings extending northwards from either of its extremities. Its many narrow halls and tortuous passages are flanked by suites of ordinary old hotel dormitories, which, with a ball room and the old dining room, constitute the wards for the wounded and sick. Dr. Gainselan, the chief physician, and his assistants, have done what they can to make and keep the place tolerably safe from infectious contamination; but when the autumnal frosts close the windows and doors, now everywhere open in that building, typhus, erysipelas, gangrene, and dysentery, will inevitably become indigenous in the close, unventilated apartments, where now the wounded are doing very well. On our visit here we noticed one amputation at the shoulder-joint nearly healed, and a resection of the head and neck of the humerus which promised well but for repeated secondary hemorrhage. The Sanitary Commission had generously supplied a water bed to this and another patient. There were twenty-four patients in the wards at the time of our visit. We observed that women were employed as nurses, and their superintendent, Miss Powell, informed us that they were a strictly *volunteer* corps. Though there is no doubt of the devotion and industry of these women, the sooner they become *regulars*, and submit to better *system* in their work, the better for them and for the patients.

The Seminary Hospital, Georgetown.—This is an old barrack-like structure that has long been used as a boarding school. Its location is somewhat better than the last named hospital, and is under the excellent management of Dr. J. R. Smith and his four Assistants, Wolverton, Riley, Norward, and Kennedy. There were 162 patients, mostly surgical cases, at the time of our visit. Seven well trained women, and two or three men, take charge of the nursing, and they do it admirably. Better bandaging, cleaner wards, bedding, and dressings, are seldom met with. The women are overworked in consequence of the multiplicity of apartments. We found two of the nurses in sole charge of eleven wards containing 44 patients. Small rooms, tortuous passages, and insufficient water supply, are the great defects in this hospital.

The Military Hospital at Alexandria.—Soon after the movement upon Manasses had been ordered, the medical director of the division, Dr. King, selected an old seminary at Alexandria for the immediate necessities of his department. Dr. ——, of the Navy, was placed in charge recently, and with efficiency and tact rarely excelled, he has turned the buildings into the best practicable condition for hospital uses. It now contains 104 patients; the more severely wounded of the cases, brought in from Bull Run. Two assistants, two cadets, eight lady nurses, and a few subordinate attendants, constitute the staff of the Institution. The system, cleanliness, and cheerfulness which are everywhere apparent in the hospital, afford the best evidences of the efficiency and faithfulness of the medical staff and nurses.

Character of the Diseases in Military Hospitals.—About five hundred of the patients are suffering from wounds, a few are suffering from dysentery, a considerable number have articular rheumatism; and the balance consists of typhoid fever, diarrhœa, etc. The gun-shot wounds appear generally to have been caused by spherical balls, and being but slightly lacerated, and mostly simple flesh wounds, they heal with remarkable rapidity. Typhoid fever is strongly marked, and to me looks threatening.

Sanitarium and Hospital for Convalescents.—Surgeon-General Finley, with great wisdom and foresight, has opened the spacious buildings and grounds of the Naval Academy at Annapolis, for this purpose. About 200 patients have been removed thither from Washington.

Preparations for the Future.—In conversation with your late confrère, Dr. Harris, of the Sanitary Commission, we found reason to feel the utmost confidence in the purposes and ability of the Government and that Commission, to provide abundantly and promptly for any emergencies that are likely to arise in the care of the sick and wounded. And we learn that while the Medical Bureau is active and energetic in its preparations, the Sanitary Commission stands ready with carefully matured measures and means, to alleviate any suffering and want to which the sick, wounded, or feeble may be exposed in the progress of the war. Its well-filled store-rooms on F street, and in the Treasury Building, and the desks of its members, promise rich blessings to our noble army of Volunteers. That the Commission and the Medical Bureau work harmoniously we may judge, from the clean and comfortable clothing, the wire-cradles, and supports for wounded, the means of amusement, the delicacies, the wine, the slippers, gowns, and the hundred writing-tables which are found, marked with the name of the commission, in all the hospital wards.

The cheerfulness and rapid recovery of the patients, is one of the pleasant rewards of the good management and humane provisions for all the patients in these Military Hospitals. Better care was never bestowed upon the inmates of our civil hospitals. Viator.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860–61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VI.—Part II.

Salivation and its Causes—Stomatopharyngitis—Pharyngitis, chronic and acute—Retro-pharyngeal Abscess.

Before leaving altogether the subject of the diseases and affections of the mouth, I desire to add a few remarks on salivation, that is, on the secretion of more saliva than is required by the ingested food or by involuntary deglutition. The secretion of the salivary glands has too long been regarded as a mere filtrating process, from the fact that in proportion to other secretions, but few solid elements are contained in it. Thus it was considered as a simple exosmotic process, in which the constitution, velocity, and pressure of the blood, nature of the walls of the blood-vessels and the glands, chemical constitution of the glandular cells, and the influence of the nerves were unknown. Ludwig at last has proven, from experiments on the submaxillary gland, that the influence of the nerves (facial and trigeminus) acts upon the secretion, without any influence of the pressure under which the blood comes into, and flows in, the gland. The same physiologist, and Czermak at the same time, have observed that the secretion is induced by irritation of the sympathetic fibres of the gland itself, and also of the trunk of the sympathetic nerve on the neck; and what is most wonderful, the latter observer has found, that under certain circumstances the irritation of the sympathetic nerves will sometimes stop the secretion brought on by the irritation of the fifth pair.

The secretion of the salivary glands appears to be under the direct influence of the brain. Bernard produced salivation by irritation of the central end of the dissected lingualis. Direct irritation of the central end of the n. glossopharyngeus has the same effect. The looking at an agreeable dish brings on salivation; so does the thinking of food while hungry, according to the experiments of Frerichs, as is also the case with the introduction into the stomach of common salt, or of food. There is superabundant secretion of saliva in ulceration of the stomach, cancer of the stomach, in the premonitory stage of vomiting, in colic from helminthiasis, in certain stages of pregnancy, in hysteria, and in cases of intermittent and typhoid fever, where we are hardly justified to attribute to salivation any importance as a "critical" symptom; in tickling the soft palate, in simple masticating movements of the jaws. Thus you see the possibility of salivation occurring on the introduction into the mouth of irritating substances, in cases of surgical diseases of the mouth, wounds and operations, and of neuralgias in the range of the ramifications of the fifth pair. Thus you perceive, also, that salivation may be produced by the irritation, though slight, of the ramifications of the maxillary nerve, around which the process of the development and protrusion of teeth is going on. At all events we are not justified in supposing that the contiguity of the mucous membrane, and the transmission of the catarrh of the mouth to the glands, are the only causes of any case of salivation. Even mercury and iodine do not appear to act first on the salivary glands. Iodine is seen in the saliva soon after it has been taken; if direct irritation of the gland was the only cause of salivation, why is it that salivation takes place so late on the administration of iodine? Mercury, too, is soon detected in the saliva, and nevertheless it takes some time before salivation appears. Moreover, the first secretion of salivation in such cases, shows that the mouth is mostly affected. For Lehmann has found, that the secretion is in the beginning thicker and less transparent, and contains more young and old epithelial cells than normal saliva; it contains much fat, little ptyaline, very rarely rhodan-potassium; and its reaction is alkaline. At a later period there are less solid elements, like the saliva secreted on artificial irritation of the nerve; it is still alkaline, contains much fat and mucous corpuscles, but no rhodan-potassium, and sometimes albumen.

Thus it is evident, that the indirect causes of increased secretion of the salivary glands may be very numerous; so numerous, indeed, that sometimes the etiology is very obscure. Thus Moore, in *Dublin Hosp. Gaz.*, Aug. 15, 1858, reports the case of spontaneous salivation in a boy of four years and a half, in whom he was unable to discover any particular cause, although the anomaly lasted for a whole month. There was no tumefaction of glands, no affection of the tongue, no medicines had been taken. The administration of chlorate of potassa and tincture of catechu proved successful.

Whenever, therefore, salivation is produced in a young child, you have to bear in mind all the possible causes of catarrh of the mouth and salivary glands, or of nervous, either peripheric or central, irritation. If you do, you will have less to say on teething and teeth, but will be more of a thinking, physiological physician.

I have noticed already that affections of the mucous membranes in general are very common in early age. One of the most easily affected is that of the pharynx. Catarrh and inflammation of the pharynx, pharyngitis, are said to occur more frequently in adults than in children; and if such was the case, this would be a fact directly in contradiction to any assumption of the prominent influence of teething in this affection. But in late years we have had more opportunity to observe pharyngitis in children than adults, this result being brought about by a number of epidemic diseases principally affecting children, and by the frequent occurrence of stomatitis. The inflammation of the mouth is undoubtedly one of the principal causes of pharyngitis, so much so that a large per centage shows both stomatitis and pharyngitis in the very same individual. Stomato-pharyngitis, therefore, is a term not unfrequently met with in literature.

I do not speak here of the chronic intumescence of the pharynx and particularly the tonsils, which is either the result of repeated acute inflammations, or is congenital. It is usually found in fair, pale, "scrofulous," and weakly children, but sometimes in robust ones also, in whom the lymphatic glands generally have a tendency to become enlarged. Their deglutition is but little interfered with, but the respiratory function, formation of voice, and development of thorax suffer much. Such children will snore in their sleep, breathe heavily, lose their breath with every effort, show a bloated and puffed appearance of the face, slightly moving nares, a pale or sometimes bluish complexion, and, on inspection, the mucous membrane of their throat appears thickened, and the tonsils greatly enlarged. The use of styptic gargles and the application of local cauteries, is here of little or no use. In a number of cases absorbents will do better, and especially mineral waters containing iodine; but more is effected than by anything else—and surely in a large number of cases, it is the only reliable remedy—by the removal of part or the whole of the tonsils, by means of a simple bougie and Museaux's hook forceps, or by Fahnestock's pharyngotome, or, as it has been called by a barbarous mixture of Latin and Greek, tonsillotome.

Acute pharyngitis has among its prominent symptoms, redness and swelling of the mucous membrane, enlargement of the tonsils, and generally, also, the uvula, which, by being elongated, and playing about the mucous membrane of the posterior and lateral walls of the pharynx, will keep up a constant irritation and give rise to a constant, obstinate, short cough, especially immediately after the child retires. Respiration is always, even in moderate cases, interfered with, and is sometimes very troublesome indeed; deglutition is very painful, and more so with liquid than solid food; hearing is sometimes injured by the consecutive affection of the mucous membrane of the Eustachian tube. Fever is more or less severe according to the severity of the cases; sometimes the circulatory and nervous system are so much affected that severe convulsions will set in. Dyspnœa will be visible on the child's face; the cheeks will be bloated, either livid or pale, eyes injected, tonsils, and sometimes other glands enlarged, and the mucous membrane of the pharynx and tonsils highly injected, of livid velvet-like appearance, and considerably swelled. Sometimes the injection is not at all general, but will appear in spots, exhibiting, as it were, a merely local, or a number of local inflammations. The inflammatory spots will particularly appear around the mucous follicles, which then show themselves as hard, prominent, whitish accumulations. Thus, there is a great variety of cases, while those who have a hereditary predisposition are most affected, and most exposed to relapses; and such cases as are of a phlegmonous character, being more severe, and less liable to suppuration, than those being merely superficial and erythematous. As a general rule, the prognosis is a very good one, absorption of the inflammatory swelling taking place after a number of days or weeks. Suppuration will sometimes occur, and the tonsillar abscess break after a number of serious symptoms, depending on aggravated deglutition and respiration, or chronic induration will take place, such as I have alluded to before; or the swelling of the mucous membrane, and effusion into the submucous tissue taking place to a considerable extent, œdema of the adjoining parts, thus, for instance, of the glottis, may ensue, and give rise to highly dangerous symptoms. This, however, is a very rare result of pharyngitis, scarcely any more frequent than gangrene or any of those frightful accidents, so much dreaded.

I have stated that pharyngitis is frequently complicated with, and in fact is even dependent on, the existence of stomatitis. I do not believe that after the preceding remarks you will be impressed with the influence of dentition, in producing severe affections of the mucous membrane of the mouth. Still less have we reason to attribute pharyngeal symptoms to any great extent to the protrusion of teeth. Nor is there any necessity of falling back on unknown, or hypothetical, or improbable causes, where there are many manifest ones. Acute pharyngitis is frequently noticed in the heat of the summer, complicated with troubles of the digestive organs, loss of appetite, furred tongue, headache; it is easily brought on by a sudden change of temperature, general, or local, and individual, or by the direct influence of cold temperature on the mucous membrane of the pharynx. This occurs particularly in such children as are used to breathe with their mouths open; here you have one of the reasons why it is so necessary to accustom children to have their mouth shut, and breathe through the normal passages. Other cases of pharyngitis are brought about by direct lesions, by means of hot food and beverages, stimulants, and sharp-pointed bodies being brought in contact with the mucous membranes. Others are observed during the course of diseases of the tongue, bronchia, and lungs, apparently from the mere contiguity of the mucous membrane. Another number, and not a small one, is produced by the influence of epidemic diseases. Particularly the eruptive fevers have a tendency to be localized on the mucous membrane of the pharynx, thus morbilli and variola, but more than any others, scarlatina and diphtheria. During the last few years, the influence of these two, especially of diphtheria, has been exceedingly great in this city, and a large part of the country, so much so that the greater per centage of diseases occurring in children were either directly seated in the pharynx, or complicated with a pharyngeal affection. I have been accustomed to inspect every child's pharynx when brought in for any sickness, not that every pharyngeal complication must necessarily be a very serious disturbance, but because I want to know the full range and extent of a disease, and, gentlemen, because a number of doubtful cases will be found to be nothing else but an inflammatory or exudative pharyngeal affection, in such times. The large number of pharyngeal affections occurring in this city for the last few years certainly depended on the prevalence of scarlatina and diphtheria, especially the latter; pharyngitis either following for a long time, or followed by, diphtheritic exudation. So frequent have these cases been, that it has been possible to form whole classes of cases under the heads of diphtheritic pharyngitis (without any exudation being present), and diphtheritic fever.

What I, therefore, lay particular stress on, is this—that a large number of cases of pharyngitis occur in early age, that their causes are both various and frequent, that the pharynx is particularly exposed to injuries, and that a large number are brought on by the direct influences of epidemic diseases. I may add that the protrusion of the teeth ought not to be referred to as a cause of pharyngitis, as epidemic diseases are more found after the first and second year than before. And I finally desire you to remember this caution, viz. to examine the pharynx of a child at least in every case in which the diagnosis is doubtful. By doing so you will not only reduce the number of uncertain diagnoses, but you will reduce the number of cases of "difficult dentition" considerably. You will often find pharyngitis, with or without stomatitis, to be the simple and easily removed cause of many serious troubles attributed to dentition.

There is no more connexion between the mode of treatment of pharyngitis and dentition, than there was between the nature and etiology of both; local and intestinal derivants, diaphoretics, purgatives, and emetics have been recommended. Gargles have been resorted to in advanced children; mustard-plasters and cold water, according to hydropathic principles, have been applied. Have they anything to do with dentition, or is the protrusion of a tooth rendered easier by these, any more so than by the incision of a tonsillar abscess? I think not, nor do you; what I think is, that dentition as a means of producing pharyngitis, except in those few cases in which stomatitis and consecutive pharyngitis may be the result of an abnormal protrusion of an abnormal tooth, through an abnormal gum, in abnormally irritable children, is a very unimportant and uncommon factor. As to treatment, I should again urge the administration of chlorate of potassa, or soda, both internally and locally. I have not seen better results from any other medicine in any case which was not past the possibility of absorption.

One of the forms, or sequelæ, of common pharyngitis is retro- or latero-pharyngeal abscess. Pain is rather severe, and exudation considerable. A semi-spherical, livid, brilliant tumor is seen, or felt, on the posterior wall of the pharynx (or laterally). Respiration and deglutition are difficult; there is cough, thickness or hoarseness of the voice. Emaciation takes place from want of nutrition; fever is very high, to such a degree sometimes that convulsions ensue, brought on besides by the swelling of the tissues of the neck and compression of the veins. It generally comes on pretty slowly, and by this fact may sometimes be distinguished from acute amygdalitis or stenotic diseases of the larynx. Its termination depends on the change taking place in the abscess; if the pus is removed, respiration and deglutition are restored, and the danger of suffocation removed, and all the severe symptoms disappear. This will occur spontaneously sometimes, but in a majority of cases incision is necessary. I have observed a child of about seventeen months of age, who had to perish from suffocation, as the parents were opposed to a simple incision into the latero-pharyngeal abscess, though easily accessible. There is, therefore, urgent danger of suffocation, from the mere size of the abscess and the swelling of the surrounding tissue, especially the velum palati and posterior nares; there are other dangers from the transmission of the process to the larynx, and thereby increasing the chances of suffocation or creating those of tedious and grave consecutive diseases; or to the Eustachian tube, thereby giving rise to either impaired hearing or perpetual deafness. The danger from deglutition is not so great, at all events food can be missed longer than air, and moreover there are other ways of introducing food into the system, besides the mouth and stomach, in cases of necessity. The chances of consecutive diseases, too, impairing the process of deglutition, are not very great, although a simple catarrhal swelling of the pharynx, or œsophagus, will fully suffice to give rise to a constant dysphagia.

Retro-pharyngeal abscesses are seated in the cellular tissue connecting the pharynx and vertebral column. They may well be classified under three heads. Some are developed idiopathically, from an inflammation of the mouth and pharynx, and the surrounding tissues, the inflammation originating from either a simple catarrhal affection or a metastatic process, influenced by an acute exanthem, typhoid fever, or pyæmia. The majority of the cases of this form occur before, or at the time of the first dentition; this period of life showing generally the greatest tendency to catarrhal affections. This simple physiological fact has evidently been the reason why retro-pharyngeal abscess has been thought to depend on, and to be caused by, the protrusion of teeth. The prognosis in cases of this class is generally favorable, unless the incision of the abscess is neglected; with the only exception of metastatic abscesses, which are but symptoms of a more or less grave affection of the whole system. Therefore, in these latter cases, every hope of a lasting cure depends on the possibility or probability of a cure of the original morbid process. Idiopathic abscesses generally, when in their first stage, require a rational antiphlogistic local treatment; application of cold, both externally or internally, the latter by slowly swallowing ice, or gargling with ice-water, with or without alum; local application of nitrate of silver, or alum; scarifications of the pharynx; leeches. When the other stages of the inflammatory process cannot be repelled, warm poultices appear to be preferable, except in instances of imminent danger from symptoms of cerebral congestion; in these cases warm emollient gargles do better. Internal treatment is unavailing, except for the purpose of diminishing the fever, or other dangerous symptoms; tartar emetic has been frequently recommended, but also rejected. Where the symptoms are very grave, and suffocation imminent, the safest and quickest remedy is incision of the abscess, and the washing out afterwards of the abscess, by gargling or syringing. Metastatic abscesses require incision, only to remove the utmost danger from suffocation, as the principal attention has to be paid to the general process. After the incision has been made, water is not sufficient for the wound to heal, but stimulants and astringents, chloretum calcariæ, alumen, nitras argenti, acidum tannicum, are required, and an internal treatment has to be resorted to, according to the general affection; bark and mineral acids will often prove necessary.

The second class of retro-pharyngeal abscesses are secondary, being produced by the suppuration of inflamed lymphatic glands, and the surrounding tissues. They are rarely found in early infancy, viz. at or before the time of the first dentition, but at a later period, which is more favorable to scrofulous and inflammatory swellings of the lymphatic glands. It is not our fault that the second dentition may fall within the range of this period. The prognosis in these cases is not very unfavorable, although it depends on the gravity of the original suppuration, and the amount of general morbid affection. The local treatment is much like that recommended in idiopathic cases, with this exception, that the original glandular abscess requires particular attention. Incisions from outside will frequently suffice to remove all the pus formed, and to relieve the consecutive pharyngeal and laryngeal injection. The gravity of the general dyscrasic affection, which gave rise to the primary suppuration, requires great care; iodide of potassium, iodide of iron, cod liver oil, air, exercise, attention to the skin, and generous diet, being strongly indicated.

A third class of retro-pharyngeal abscesses owe their origin to the suppuration of cervical vertebræ, or their ligaments. They are seldom found before the age in which secondary abscesses have been observed, caries of the cervical vertebræ and well-developed tubercular disease generally being more common in later life. Their prognosis is very unfavorable. Incisions, which ought to be made as late as possible, are only of momentary use, they being unavailing in relation to the primary affection. As in all such diseases as resist treatment (all being nearly hopeless), a large amount of remedial agents, dietetic and pharmaceutical, have been recommended; you may consider it to be a general rule that the number of remedies (infallible remedies) recommended, increases in proportion to the hopelessness of a disease or a given case. Quiet, posture, cold, leeches, mercury, and wine, both externally and internally; calomel, nitrate of potassa, tartar emetic, iodide of potassium, and iron, have been recommended, according to indications. They have been used and abused in many cases. These will generally terminate fatally; either slowly, by hectic fever and exhaustion, or very suddenly indeed. I have seen a young man die suddenly while turning his head on the pillow. Making the post-mortem examination I found the ligaments of the vertebral column, in its upper part, mostly destroyed; a few remnants had been torn by the last move of the patient, and the process of the axis entered the foramen magnum, destroying the tissue of the medulla oblongata.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. IV.

INDICATIONS FOR THEIR EMPLOYMENT.

To remove the *syphilitic diathesis*, mineral waters are powerless; but when anti-syphilitic medication has been pushed to extremes, its pathogenetic effect is seen in the development of that well known cachectic condition, of which impoverishment of the blood is the characteristic, and of which the arrest is imperative. The value of treatment by mineral waters in such cases is notorious: it is known to be often the *dernier ressort*. The simple hygienic influence of a season at the springs is beneficial, and intensifies the effects of some waters; but it is their internal employment on which alone we are to rely in these cases. The thermal sulphurous, and sulphurous-alkaline, and the stronger cold chalybeate common-salt, are the kinds indicated; the two former, especially, where mercurial poisoning is most evident or suspected, the latter where the anæmic condition calls for a speedy invigoration of the system. All three kinds are remarkable for their power of "throwing out" the cutaneous eruptions pathognomonic of syphilis; thus removing any existing doubts on the subject. The obstinacy of syphilis occurring in the scrofulous is notorious; the use of waters like those of Nauheim or Adelheidsquelle, by correcting the scrofulous diathesis, leaves the syphilitic simple and more easy of cure. A subsequent simultaneous use of mercury may be put in force with all the more confidence, as its poisonous effects are not likely to be reproduced while the appropriate mineral water is taken at the same time. The same rules of treatment are eminently applicable in the hereditary constitutional syphilis of infants.

In few constitutional affections have we more positive evidence of the medicinal efficacy of mineral waters taken internally, than in the *scrofulous diathesis.* They not only exert a modifying influence on the constitution itself, but also on the local lesions. It is especially the common salt waters which are indicated; though where the skin is the main seat of the disordered action, the sulphurous may be employed, preferably however the sulphurous-common-salt; but after any use of sulphur waters a course of chalybeates should follow. Dr. Sée,* of the Hôpital des Enfants, at Paris, has declared that, "the bottled waters of Nauheim preserve nearly all their efficacy in scrofula, especially in enlargements of the cervical glands, of which they speedily cause the entire resolution." I quote this observation for two reasons: in the first place, such evidence establishes beyond a doubt the value of the waters taken internally as medicines—for one cannot reasonably ascribe any good effect to the imagination of infants or very young children, or to the hygienic influences of French hospital air, or to the aid of baths of the same water, for they were not employed; in the second, it supports the opinion now becoming prevalent, that iodine is not the specific for scrofula it was once thought to be, and that mineral waters rich in chlorides, especially if alkaline and chalybeate at the same time, are superior to all the compounds of iodine or bromine. Thus, there is no iodine in the waters of Nauheim, and only a trace of bromine; but there are 60 grs. of common salt, 3 of chloride of calcium, 12 of bi-carbonate of lime, $\frac{4}{10}$ of proto-carbonate of iron, and $\frac{12}{100}$ of proto-carbonate of manganese, in the pint. This is a fair specimen of the kind of water most suited to all forms of scrofulous disease —a model or normal formula. The Rakoczy of Kissingen is another excellent one, from the use of which I have derived the most satisfactory results. It is more laxative than the Nauheim, containing a notable amount of magnesian salts. The Elisenquelle of Kreuznach has also a very great and deserved reputation for its power of relieving even the most obstinate forms of scrophulosis, whether in the torpid, the glandular, or the cutaneous form, scrofulous caries, leucorrhœa, etc.

To the surgeon the employment of these medicinal agents affords a resource without the aid of which all his efforts will in a large range of local ailments prove abortive; let but the diathesis be favorably modified by their use, and the same disorders will readily yield to the influence of treatment they had previously long resisted. I have indeed seen many cases of ophthalmias recover without any local treatment whatever, after a four or six weeks' course of the Rakoczy, though they had previously been under the judicious treatment of surgeons of reputation, in some instances upwards of a year, without making a step towards recovery. The explanation seems very simple; the bricks could not be made without the straw—the breaches of surface repaired without the right material to do it with—the ulcers healed without a blood affording the plastic elements necessary to cicatrization. The rapid healing of the foul sores sometimes accompanying the cachexia already treated of, which is supposed to be a compound product of syphilization and hydrargyrosis, under the appropriate balneologic treatment, may be referred to as an illustrative parallel. In the treatment of all local ailments occurring in a scrofulous constitution, such as diseases of the skin and mucous membranes, and ophthalmias, glandular enlargements, and even in caries, necrosis, and Pott's disease, mineral waters, better than any other known treatment, will be found to develop vital energy with improved nutrition, while they allay morbid irritability.

The following two cases illustrative of the effects of the Heilbrunn water I extract from Dr. Sutro's work on the German mineral waters:

M. Fellerer, from the Hospital for Incurables, states that J. M——, thirty-eight years of age, had been affected from his childhood with various glandular swellings. Subsequently scrofulous ulcers appeared on the right foot, and were complicated with caries; his illness was aggravated by an increasing enlargement of the thyroid gland, so that at his reception his struma was enormous, weighing about four pounds, and impeding respiration and speech more and more. After an ineffectual treatment by pharmaceutic remedies, Adelheidsquelle (Heilbrunn) was ordered. Persevering employment of this remedy for six months effected a complete cure of the goitre, and the patient would have been discharged but for the presence of the carious ulcers.

A child of ten weeks, emaciated and wrinkled in appearance, vomited after it had been fed, and had besides twenty to thirty alvine evacuations daily; the tongue was covered with mucus and small ulcers; the pulse almost imperceptible and extremely frequent; the temperature of the abdomen and forehead heightened; and the extremities cold. The first child had died at the age of twelve weeks, from consumption, and the mother was desolate at the probable loss of this her second child. Dr. Wetzler recommended her to give it some broth five or six times a day, and almond milk to drink, and he sent her a bottle of Adelheidsquelle, with the direction to give the child two teaspoonfuls three times a day. After a fortnight half the bottle was used, and the recovery so advanced that further medical treatment was dispensed with.

Of *disorders of the nervous system* I pass but lightly over paralysis, the more serious forms of which are treated with great success at Wildbad, Gastein, Franzensbad, &c., because the internal use of the waters of these sources plays but a very unimportant part, or is wholly neglected. Not so with the less grave cases, whether deutero-pathic or only sympathetic, which are much benefited by mild solvent chalybeates such as Franzensbad, in which sulphate, muriate, and carbonate of soda so modify and control the agency of the iron, as to make it always safe to experiment with. The stronger chalybeates may follow, with the best effects.

The neuralgias afford a wide field of doubt, difficulty, experiment, and success, for mineral waters are rarely used in such cases until ordinary therapeutic measures have failed. The doubt and difficulty concern the pathological relations of the pain; experiment may enlighten us, and then success may be expected to follow rational treatment. Thus it is by no means uncommon for a hemorrhoidal, gouty, or rheumatic attack to supervene, when the patient is submitted to a course of hydro-mineral treatment; the neuralgia disappears; it remains to combat the primary disorder, which is commonly best done by a persistence in the use of the same water which unmasked the latent evil. In the absence of other guides, it will be always well to study the diathesis; bearing in mind what I have already advanced touching the special value of these agents in the diathesic affections. Thus where the scrofulous diathesis is marked, the strong chalybeate common-salt waters, if the blood-making process seems most at fault—the thermal sulphurous, if the skin be in unhealthy condition, would be indicated; the use of the latter to be followed up by that of strong chalybeates. For the cure of true tic douloureux of the fifth pair of nerves, the waters of Carlsbad have long maintained a deserved celebrity. Migraine, or periodic sick headache, I have hardly ever failed to cure with common-salt chalybeates, such as Kissingen or Homburg, more rarely requiring Carlsbad. The migraine of exhaustion, whether caused by excessive heat or want of rest, may be arrested at once by the pure chalybeates, a single glass of Pyrmont often sufficing. In solar exhaustion its restorative effects are striking, nor is it less valuable as a prophylactic. The large class of painful affections to which belong congestive headache, gastralgia, enteralgia, lumbago, sciatica, many of the phenomena attributed to so-called spinal irritation, colics, etc., being often certainly and always suspiciously connected with a peculiar condition, which I shall call the *hemorrhoidal diathesis*, I reserve for future mention. In neuralgic affections traceable to paludal, mercurial, or lead poisoning, no remedies approach in curative power the thermal waters, such as Carlsbad, or in some cases Kissingen, and its congeners. In that compound diathesis, in which the excessive use of quinine has engrafted chronic cinchonism on a constitution still under the influence of the malarial poison, and a train of nervous affections "drags its slow length along," Carlsbad, followed, after a short interval, by strong chalybeates, will prove entirely satisfactory.

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* Armand Rotereau.

The following outline case is doubly illustrative:—Judge K——, after exposure to wet and fatigue, during the great fire at San Francisco, was attacked with a most severe neuralgia in the head, which he could never very satisfactorily localize or describe. During the paroxysms, which came on most acutely in the evening, he always lay prone on his face, with clasped hands pressing on the vertex. For three years all treatment had failed of giving relief; the suffering compelled the free use of opium; and whether from the influence of the drug, of the disease, or of both combined, his mind was evidently failing. A four weeks course of Carlsbad gave him entire relief, physically and mentally; the more perfectly, as this water possesses so remarkable a power to remove the bad effects of a long-continued, gradually increasing use of opium. Another phenomenon accompanied the cure of Judge K——, not without interest, though neither exceptional nor uncommon. A false anchylosis had for fourteen years kept bent at a right angle, the second joint of the right little finger, injured in youth. On the tenth day of treatment he observed that the joint was becoming mobile; on the fourteenth it was perfectly so. The solvent power of which this is a striking instance, renders it necessary to be careful in prescribing Carlsbad; for if too long continued, even the callus uniting the ends of fractured bones is occasionally so softened as to call for a re-application of splints.

PRACTICAL REMARKS ON MINOR MIDWIFERY

By EZRA M. HUNT, M.D.

OF NEW JERSEY.

(*Concluded from page 104.*)

VII.—Use of Relaxants.

We not unfrequently meet with cases in obstetric practice, in which the os seems indisposed to yield before the influence of pains, and although these are frequent, persistent, and severe, little or no progress is made. In such cases, the value of relaxants often comes up as a question to the mind, and it is important to be able to make judicious choice between them. Venesection, tartar emetic, and morphine, stand most prominent in this list. As to bloodletting in tedious labors, not complicated with congestive convulsions or any other anomaly, we believe it very rarely indicated. We cannot predicate what may be the unavoidable loss of blood by the uterine vessels before the labor is completed, and accidental cases sometimes show us what a serious thing prostration, from loss of blood, proves after labor.

Tartarized antimony is not so objectionable, while it very often effectually accomplishes the object desired. It is a depressant which we can more easily accommodate to circumstances, and upon which we can more certainly reckon than many others; and although still more direct sedatives such as veratrum, aconite, etc., are fashionable, we confess we have not yet discovered the vast superiority over the old tartar. But in this class of cases we regard morphine as more generally applicable than either of the others. Not only as relaxing the rigid os, but as suspending temporarily ill-directed pain which sometimes seems to irritate and exhaust the uterus rather than facilitate progress; it prepares it to resume its power with more efficient aim. The following case illustrates its action:

Mrs. M——, a small, narrow-built woman, the wife of an unusually large man, was taken in labor with her first child. After twenty-four hours of pain, most of the time quite severe, no adequate progress was made. The os was but imperfectly dilated, the diameters of the pelvis indicated at least great tediousness, and the woman was much exhausted. There was some fever of an irritative character, and partial rigidity. I gave her a dose of morphine, and came home to rest. It lulled the pain somewhat, but as soon as its full effect was felt the womb readily dilated, and labor was accomplished before I could return. My placebo and medical nap-promoter had expedited labor, as nothing else could. While it relaxes and temporarily suspends pain, it does not depress as much as do other sedatives, and is highly available in the few cases in which some such design is implicated.

VIII.—Prolapse of the Cord.

In cases of prolapsed cord, have we any other resource in order to save the child than to endeavor to keep up the cord until the head has become so engaged as not to permit its passage? The old method of pushing and hooking it up was a fine theory, but any one who has tried the provoking experiment is more concerned to know how it may be made to stay there. The plan suggested by Dr. Thomas of placing the woman in such posture upon the knees, and inclined forward so as by the force of gravity to keep the cord up, is a good one, where it can be made available; but some women will not submit to be kept in this position for a sufficient length of time to accomplish the object, and besides, any change of posture, made momentarily necessary by circumstances, is very apt to reproduce the trouble. The following case illustrates a plan which may be available where there are the same attendant circumstances. A lady who had recently removed hither, had had very serious trouble in former labors from a contraction of the superior strait, so that, as she expressed it, in the first bearing down pains the child seemed determined to come through above the bones. There was a full inferior strait, but in the early pains the cord made its appearance externally as soon as there was a passage for it through the "os uteri." Persistent attempts at reduction by both the above methods were unavailing, and my only hope was, after full dilatation of the womb, so to time the use of ergot as to hasten delivery after the superior strait was fully reached by the long diameter of the child's head. Although its contractions are continuous instead of intermittent, yet the continuous pressure of the one, if that is rapid in its relief, is no more hazardous than the tardy action of the other; for so far as the cord is concerned, the natural pains, just as much as the ergot, inflict an unremitted pressure on the cord, in slow cases, during the last few minutes of labor, and thus secure fatality to the child. In this case, the ergot acting rapidly hastened delivery, so that the child, though somewhat asphyxiated, escaped unharmed. The plan is seldom applicable, but not inexpedient where there is a full pelvis and where other methods have failed.

IX.—Tying the Cord.

The tying of the cord, though in theory a very simple matter, is one in which mistakes are sometimes made. A case occurred to me a few years since, in which an unskilful person tied it with a silken string several times directly at the umbilicus, and the result was peritonitis and the death of the child. Such an error could only occur in the hands of an ignoramus.

The time of tying the cord is to be governed entirely by the condition of the child. It is a matter about which there is no haste, unless the condition of the patient in other respects requires immediate attention; and even then, may be left until afterwards. If the child is actively breathing, circulation through it will cease of itself; if not, it needs to be kept up by leaving the cord intact, except in those few exceptional cases where it is advisable to cut it without tying, in order to abstract a slight quantity of blood. In a very large cord, where it has been tied very soon, I have once or twice seen after difficulty. A case will illustrate. I was called some time since to see a lady in confinement with her third child, on account of fright merely, and a want of confidence in a young physician who was managing the case well. The child when born was, I noticed, attached to the placenta by a very large cord, and there being no asphyxia whatever, the cord was immediately tied and cut by the attending physician. He seemed to draw the ligature tightly, and requested me to attend to the delivery of the placenta. Stepping into the other room, and hearing no noise from the child, I inadvertently stepped up to look at it, and found it pale and beautiful as wax, but its lower blanket saturated with blood, and it was only by the persistent attention and stimulation of hours that it was kept in existence. He had drawn the ligature, I am sure, with usual tightness, but the umbilical vessels were quite incompressible, and hence had not drawn it tightly enough. If you will accustom yourself to feel the beating of the cord after delivery, you will notice great differences in this respect. A case recently of my own, in which I noticed an unusual degree of tenseness which led me to draw the string quite tightly, I afterwards found beginning to bleed in just the same way. Any such risk I am now in the habit of avoiding very easily and satisfactorily, by compressing the cord between the thumb and finger for a moment before tying it—thus interrupting the circulation. This, if the child is active, will make more perfect the change from fœtal to respiratory circulation; if not, will indicate to us whether it is proper as yet to sever the connexion and prevent such an accident as the one noticed. The cord is thus tied with greater ease, the spirting of blood upon the bed clothes prevented, and the risk of further hemorrhage dispelled. Another plan is to tie but one knot in the ligature, then cut the cord, draw the string more tightly, and make the second tie.

X.—MANAGEMENT OF THE PLACENTA.

The management of the placenta forms an important matter in the safe conduct of labor, and quite various is the instruction given with regard to it. Denman calls it a natural labor, only when the placenta is expelled without any interference; others make it quite a common practice to take away the placenta without delay; and between those two extremes, you find practitioners of every shade of practice and belief. On the one hand, it is represented to be bold and meddlesome midwifery to introduce the hand within the uterine walls; while others say, that the man of sense who uses his hand as the index of a judicious mind, seldom does harm in the cavity. One great error, as it seems to us, in respect to this placenta business, as well as in many other obstetrical points, is to regulate every thing by measurement of time. One may be in natural labor two days, and another require interference in less than three hours, and so, as to the placenta we have our specified time tables, and they vary, according to the best authorities, from a few minutes to a few hours. Now all these equations of time are merely circumstantial, and not essential and exact. It is true as a general remark on the one hand, that a bad rapid extraction may too suddenly rupture the uterus, or encourage too much interference, and also that a delay of an hour or so renders the uterus susceptible to hæmorrhage; but after all the true test is the state of the uterus itself, and the degree of its contraction. Whenever the womb is well contracted, be it ten minutes or five hours after delivery, then is the time the placenta should be forthcoming.

The placenta is a non-contractile surface spread out on a contractile one, whether we regard its connexion as direct or by endosmosis; and whenever the uterus contracts, and not till then, separation takes place. If it does not then soon appear, or at least is not easily accessible, it is either held fast by adhesions or is held loose in the uterus or vagina, in no way doing any good service. If there is uterine pain, this is often sufficient to expel it; and if not, still there is some contraction, sensible interference promotes it, and aids the very object desired. We believe the following to be the right practice:—Within a very short time after delivery, the hand of the physician should replace that of his assistant externally, in order that he may appreciate the precise condition of the womb, and if this is feeble in contraction, a little judicious pressure and irritation will probably facilitate it. Then with the hand of the assistant holding gently but not forcibly the uterine tumor, take hold of the cord firmly with a dry cloth, and making it tense without pulling, with the other feel the edge of the placenta. If there is some pain with a slight cough or blowing through the closed hand on the part of the patient, tighten the cord, at the same time, getting hold of the edge of the placenta between the fingers by a wavy motion from one hand to the other, endeavor gently to remove it. There will seldom be a failure, the contraction of the womb, and not time, being the chief director as to the moment when it is to be done. My early teachings were to trust entirely to nature, and let the placenta alone at least for two or three hours. Pursuing this course, while all beforehand passed along pleasantly, I found myself often much embarrased, and needing to call for aid in delivery of the placenta. In each case the idea of adherent placenta was suggested, but examination satisfied me of no such thing. In most of these cases the placenta lies loosely in utero or in the vagina, and often will be a long while getting away if not removed. The position is one not favorable to complete expulsion, for there is not, as in the case of the child, a cone with its apex in the rear, and a lengthened body in which pressure upon the back part is of necessity without diminution propelled to the front. With the contraction of the womb first secured, a matter easily determined, there is but little risk in a removal of the placenta, and where there is hæmorrhage, and only partial contraction after cold, and other means fail, the removal of the after-birth will often afford relief. Where the placenta is delayed, even though at last delivered, there is more hæmorrhage, more after pains from retained clots, more persistent and debilitating lochial discharge, and recovery more tardy. Introduction of two or three fingers or of the hand, even into a contracting cavity, just emptied of several pounds of bulk, and through an os which has just passed a head, is quite a different matter from their introduction when the child is there, and the cervix is but partially dilated. He who pursues the course indicated, recognising at the same time the preference of an introduction of the hand to a long retention of the placenta, will find but partial interference necessary, and often none at all, and will have less to do with hour-glass contractions, than half-hour waiting accoucheurs.

XI.—REVIVING CHILDREN WHEN RESPIRATION IS ABSENT OR INCOMPLETE.

There are two different indications to be aimed at, either to keep the fœtal circulation as long as possible, or to cause respiratory action. If reliance is to be placed upon the fœtal organs, the chief indication is to be derived from the beat of the umbilical artery. I once saw an old practitioner, after a child had been born comatose, placenta and all, at once thrust the whole in warm water, with the idea that the placenta had power to sustain life even after its separation. It readily suggests the question, whether or not there is any power of this kind, for we sometimes, even in cases of living children, have reason to believe that there must have been partial or complete separation before birth, and a case reported by Dr. Baldwin to the *Boston Surgical Journal*, as well as some anomalies noticed in the beat of the artery, seem to point to the same inquiry. Whether it is possible by thus removing the placenta to restart its action, is very questionable. The other point is worthy of more careful thought. Our main reliance, however, in these classes of cases must be to overcome asphyxia by the same general laws as are applicable in other cases; and the plan suggested by Marshall Hall, and still more the Silvester method, as detailed in one of the recent numbers of Braithwaite, is especially applicable. Where the face is congested, the bleeding from the cord sometimes avails, and even cold dashed over the chest, and a smart slap, may cause an inspiration. These cases are often given up too soon. A friend of mine once revived a child who had by the friends been deposited in a utensil for removal; and not unfrequently the flow of life is not so completely stopped in these little ones, but that faithful effort will restore it. I have thus ventured to dwell upon some of these main points as either underrated, or not noticed by many authors, and if in so doing I have added or drawn attention to any point deserving of more careful consideration, each one's guarded experience will prove the proper test of its importance.

SPONTANEOUS ROTATION OF THE FŒTAL HEAD DURING LABOR,

FROM THE OCCIPITO-POSTERIOR POSITIONS TO THE ANTERIOR.

By JOSEPH MARTIN, M.D.,

OF NEW YORK.

The frequent rotation of the fœtal head, from the posterior to the anterior positions, was first discovered by Dr. Solagne, one hundred years ago. Baudelocque, some ten years after, mentioned the fact; and, in relation to the proper practice in such cases, says, in his work on Midwifery:—"The example of the spontaneous reduction of the posterior positions indicates what we ought to do in order to save the woman from the difficulties of this species of labor." And adds—"by attempting it early the accoucheur may always determine the head to take that favorable position."

Naëgelè, in his treatise on the "Mechanism of Labor," without mentioning Baudelocque, demonstrates the frequency of the spontaneous rotation forward, of the fœtal head in labors with the posterior occipital positions; but, with his usual prejudice against the employment of artificial aid in the practice of midwifery, he repudiates all interference, if nature does not effect the change.

Professor Simpson, in the *Northern Journal of Medicine*, for April, 1846, shows, by statistics, that—"In twenty-nine out of thirty labors, with the head in the occipito-posterior position, the forehead rotates round and emerges posteriorly." And he says—"Where instrumental aid becomes necessary, we should make the forehead rotate backward, and the occiput forward, according to those rules we have seen nature follow. For the more perfectly we imitate the principles of nature, the more perfect will our practice be." He then quotes Smellie, to show that he discovered by chance, that delivery with the forceps, in such cases, is much facilitated by bringing the occiput forward.

As, however, it is difficult to determine what may be the result of a labor with the head in an occipito-posterior position, I contend that, in accordance with the indications of nature, *the change ought to be uniformly made* by the hand, or one blade of the forceps, except when the head is very small, and the pelvis large. By this simple treatment a protracted labor, with more or less unnecessary suffering to the mother, will be prevented, a resort to the forceps will be superseded, and the life of the infant secured.

And here it may be remarked that, as nature does not act from caprice, and as the rotation of the occiput from the spine of the ischium forward to the foramen ovale is, as Naëgelè has shown, *the rule and not the exception*, it is reasonable to conclude that there must be some peculiarity in the anatomical structure of the female pelvis, designed by nature's Great Architect to effect the change of position, so as to produce the most favorable results. And this I have good reason to believe is the fact, as I shall now proceed to show.

The oblique diameters of the female pelvis at the brim, are respectively five inches. And the diameter, measured from the brim at the left acetabulum to the spine of the right ischium, two, or two and a half inches below the brim, at the right sacro-iliac synchondrosis, is also five inches. But the diameter, measured from the left sacro-iliac synchondrosis, at the brim, to the right foramen ovale, two or two and a half inches below the brim, is five inches and a half in a small pelvis, and five and three quarters of an inch, in a large pelvis.

Now, in a labor with the head in the right occipito-posterior position, the vertex sinks into the cavity of the pelvis until the sub-occipital space is at the spine of the right ischium and the forehead is pressing upon the brim at the left acetabulum. And while the head is in that position, the sub-occipito-frontal diameter will be in relation with a pelvic diameter of only five inches. But, as the plane of the ischium is inclined forward and downward, the occiput, as the labor progresses, must have a natural tendency to glide toward the right foramen ovale, *because there the sub-occipito-frontal diameter will be in relation with a pelvic diameter of five and a half or five and three-fourths inches.* Similar measurements, made from the right extremities of the oblique diameters of the female pelvis, will give the same results.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. I. E. TAYLOR.

(Reported by Henry M. Lyman, M.D., House Surgeon.)

Rupture of the Uterus.

Mary S——, a married woman, twenty-five years of age, a native of Ireland, pregnant for the third time, was confined July 1, 1861. Her first child was still-born; her second pregnancy, three years ago, resulted in the birth of twins, both of which died shortly after delivery. These previous labors had been short and easy; the patient was unable to state whether they had occurred at full term; and in the present case she could not fix the date of the cessation of her menses.

The pains of labor commenced at one o'clock in the morning. Three hours later the os had become dilated to its fullest extent, the bag of waters protruding far into the vagina. The fœtal heart was inaudible. The membranes were ruptured at this moment, and the funis immediately made its appearance at the vulva. It was pale, flabby, and pulseless. The head of the child seemed to be tightly wedged in the superior strait of the pelvis; the occiput being in contact with the symphysis pubis, while the anterior fontanelle could be felt opposite the first piece of the sacrum. The funis was compressed against the pubes of the mother and could not be released from this position, although all the usual methods for effecting its reduction were attempted. The pains were strong and regular; yet, for three hours, the head of the child remained absolutely immovable. At 8 A.M. the occiput began to rotate slowly towards the right acetabulum. At 10 A.M. the patient was seen by Dr. Taylor. The head was at this time so much swelled and changed in form by the overlapping of the bones, that it was with considerable difficulty that the occiput could be recognised in the position which it had assumed opposite the right acetabulum. The pains were now frequent, and so violent that the patient became black in the face during each paroxysm. The head advanced slowly till five minutes past eleven o'clock P.M., when the terrific efforts of the patient were suddenly suspended, and she immediately complained of a severe cutting pain in the right iliac fossa. Dr. Taylor again saw the patient at one o'clock P.M. when the head had so far receeded that it could only be reached by the introduction of the whole hand into the vagina. At half-past twelve, nearly a pint of blood had made its escape, with a sudden gush, from the vulva. At half-past one, the patient was examined by several of the medical gentlemen in attendance at the hospital, one of whom was of the opinion that he had discovered a solution of continuity in or near the neck of the uterus. Dr. Taylor now proceeded to effect delivery by version. The patient was brought partially under the influence of chloroform, and the right hand was introduced into the uterus. The head was found lying transversely above the brim of the pelvis, with occiput directed towards the right side of the mother. Proceeding a little further, the left foot of the child was encountered, and was at once drawn down into the vagina. Then making gradual traction, assisted by the expulsive efforts of the abdominal muscles, the breech and body of the child were delivered with a spiral movement that brought the nape of the neck and the occiput under the arch of the pubes. The anterior shoulder was delivered before the appearance of the posterior shoulder. Failing, after a delay of several minutes, to obtain any additional assistance from the abdominal muscles, a finger was introduced into the mouth of the child, and the head was immediately born. After waiting more than half an hour for the delivery of the placenta, the hand was again introduced into the vagina, but the cord did not guide the fingers into the cavity of the uterus. Through a wide rent, which seemed to occupy the upper and anterior portion of the wall of the vagina, near its reflexion upon the uterus, the hand passed without effort into the peritoneal cavity, where the placenta was lying among the intestines in the right iliac fossa. The organ and its accompanying membranes were removed without difficulty. The uterus was, at this time, firmly contracted, scarcely admitting the forefinger into its cavity. The patient was then covered up in bed and placed under the influence of morphine. Her skin was cool, tongue clean, pulse 64, full.

July 2, 1 A.M.—Pulse rapid and small; patient began to suffer great pain. The administration of morphine was continued, and hot fomentations were applied to the abdomen. Nine A.M., skin blue and cool; pulse thready and rapid. The suffering was extreme, and the patient soon became delirious; the extremities grew cold; the bowels were evacuated without her knowledge; her breathing was hurried and laborious: and thus she continued, in spite of every effort for her relief, till 1 P.M., when death put an end to her agony.

Autopsy, twenty-four hours after Death.—Rigor mortis well marked. The capillaries of the skin very much congested. The cranium and the thorax were not opened. The peritoneal cavity contained between one and two pints of bloody serum. The peritoneum was everywhere intensely congested. The uterus was contracted to the size of the head of the fœtus at full term. The *os internum* was firmly contracted, like the mouth of a bag that has been tied with a string. The canal of the cervix was dilated so as to form with the vagina a continuous passage from the os internum to the vulva, only interrupted at the position of the *os externum* by a thin fold of mucous membrane which encircled the canal, very much like one of the *valvulæ conniventes* of the small intestines. Through the right anterior wall of this immensely dilated cervix, three lines below the os internum, was a transverse rent, at least three inches long. The surfaces of the uterine cavity, and of the canal of the cervix, were smeared with bloody mucus. On removing the soft parts from the pelvis, the symphysis pubis was observed to be remarkably prominent posteriorly, forming a boss that considerably narrowed the antero-posterior diameter of the superior strait. The following measurements were made upon the bony pelvis:

SUPERIOR STRAIT.

Antero-posterior diameter	3¼	inches
Left-oblique "	4⅝	"
Right-oblique "	4⅞	"
Transverse "	5⅛	"

INFERIOR STRAIT.

Ant.-post. diam. (the coccyx being pushed back)	4⅛	"
Between the tubera ischii	4⅛	"
Between the ischiatic spines	3⅞	"

The antero-posterior diameter, from the centre of the posterior surface of the symphysis pubis to the centre of the anterior surface of the third piece of the sacrum, was 4¼ inches. The child was well formed, and weighed seven pounds and six ounces.

A CASE OF PREGNANCY ASSOCIATED WITH OVARIAN DROPSY.

Catharine R——, æt. 36, married, a native of Ireland, the mother of five children, last menstruated in September, 1860. She was admitted to the hospital at 3 P.M., June 27, 1861, having then been in labor for three days. The abdomen was immensely distended by an accumulation of fluid, which appeared to occupy the cavity of the peritoneum. The history of the patient, however, indicated ovarian dropsy. The tumor commenced its growth four years previously, since which time she had been delivered of a living child, and had been tapped twice at intervals of fourteen or fifteen months.

On admission, the patient appeared very much exhausted. The pains, however, were regular and moderate, and the os was nearly dilated. The head of the child presented in the first position. At 6 o'clock P.M. the os was fully dilated, the membranes were ruptured, and an unusual quantity of amniotic fluid made its escape. The pains continued at regular intervals, but were too feeble to advance the child. At 10 P.M. she took ten drops of Magendie's solution of morphia, and soon fell asleep. At midnight she awoke, the pains were renewed, and at the end of forty minutes the child was born. The contractions appeared to be wholly confined to the uterus; the abdominal muscles took no part in the expulsive effort. There was no hemorrhage, nor any other unfavorable circumstance. After the delivery of the child, which was a boy, weighing six pounds and twelve ounces, the size of the abdomen seemed to be in no way diminished, but the flanks and the hypogastrium were, for the first time, resonant on percussion, indicating that the accumulation of fluid was confined to the cavity of an ovarian cyst. The patient immediately fell asleep, and awoke much refreshed in the morning. She improved rapidly in her general condition, and on the 11th of July the cyst was tapped. A canula was introduced into the tumor, midway between the umbilicus and the pubes, and ten quarts of thin chocolate-colored fluid were withdrawn. The patient maintained a recumbent posture during the operation, and experienced no pain nor discomfort. After the contents of the cyst had made their escape, a broad bandage was placed around the abdomen, and twelve drops of Magendie's solution of morphia were administered. The patient complained of slight pain and uneasiness during the ensuing twenty-four hours, but at the end of this time these sensations subsided, and she felt no further inconvenience, recovering rapidly, and nursing her child as if nothing had happened.

A CASE OF SOFTENING OF THE BRAIN.

SERVICE OF DR. A. B. MOTT.

(Reported by HENRY M. LYMAN, M.D., House Surgeon.)

Cerebral Softening.—Apoplexy.—Concussion.—Compression.—Death.—Autopsy.—Philip F., æt. 25, single, intemperate, a stage-driver, was brought to the hospital Aug. 1, 1861. For several months he had appeared to be sluggish in his movements, and much disposed to sleep. During the past winter he had suffered with rheumatic pains in his limbs and back. On the 1st of August, he fell from a coach which he had been driving, and struck his head upon the pavement of the street. He was taken up in a state of unconsciousness, and was brought to the hospital. On admission, the body presented no marks of injury. There was a slight tumefaction of the integuments of the scalp over the right temple, but there was no evidence of fracture or depression of the skull. The respiration was natural, the pulse slow and soft, the skin was cool, the pupils were contracted, there had been vomiting. The patient was placed in bed, and bottles of hot water were applied to the feet. Aug. 2d.—The skin and pulse were natural, the pupils were unequal, the right side was incapable of motion, but on pinching the skin of that side responsive twitches were excited upon the left side. During the three following days the patient was treated with croton oil, iodide of potassium, and counter-irritants, with considerable improvement of the muscular power of the left side. The right side, however, continued completely paralysed, and on the 6th of August the insensibility of the patient became merged in coma. The frequency of the pulse began to increase rapidly, and continued to increase until the evening of the 7th of Aug., when it had reached one hundred and fifty-eight beats in a minute. It soon became so rapid and feeble as to defy enumeration, and at nine o'clock P.M., Aug. 7th, death occurred.

Autopsy, thirty-six hours after death.—Weather cool and damp. The surface of the body presented no unusual appearance, except a slight abrasion of the right ear, and of the right side, above the crest of the ilium. No wound or appearance of injury was detected upon the scalp, with the exception of a slight tumefaction above the right temple.

On opening the cavity of the cranium a small quantity of blood, partly fluid and partly clotted, escaped from a cavity in the substance of the middle lobe of the left hemisphere of the brain, at a point immediately over the left ear. The investing membranes of the brain were generally healthy, but there was considerable congestion of the vessels of the pia mater, and the dura mater lining the middle fossa of the base of the skull upon the left side, was thinner than the corresponding portion upon the right side. The substance of the right hemisphere was everywhere healthy, as also the superior portion of the left hemisphere. The amount of fluid in the ventricles was normal. The middle lobe of the left hemisphere was softened and broken down throughout its whole extent, from the outer wall of the left lateral ventricle to the surface of the brain, laterally, and from the transverse diameter passing through the posterior cornu of the ventricle to a similar diameter passing through the anterior portion of the corpus striatum. The superficial portion of the diseased mass was filled with clots of blood of a dark color, and apparently of recent formation. The softened and broken down tissues were of pale red color near the clots, shading off into a faint yellowish hue as the limits of the diseased portion were approached.

Upon the right side of the skull, between the dura mater and the inner table of the bones, was a small clot of blood occupying the anterior portion of the middle fossa of the base of the skull. There was also a fissure extending from a point a little above the anterior inferior angle of the right parietal bone, through that angle and across the anterior portion of the great wing of the sphenoid bone till it terminated in the sphenoid fissure. Some of the branches of the meningeal arteries seemed to have been ruptured by the violence which occasioned this fissure.

The arteries at the base of the brain (the carotid and the basilar) were atheromatous.

Thorax.—The lungs were healthy. The right pleuræ were bound together by old adhesions. There were a few old adhesions between the pleural surfaces posteriorly on the left side. The heart was fatty; weight, 12¼ oz. A small atheromatous patch was observed in the arch of the aorta.

The liver was fatty, weight, 4 lbs. 5 oz.

The kidneys were fatty and darkly congested. Weight of the right kidney, 3 oz., of the left kidney, 3¼ oz. No other abnormal appearances were observed.

Microscopical examination revealed the existence of pus in a cavity within the pituitary body. The softened portion of the brain appeared to consist of broken down nerve fibres, granular cells, and granular matter, blood corpuscles, and exudation cells.

American Medical Times.

SATURDAY, AUGUST 31, 1861.

A SUSPENSE OF FAITH.

A distinguished leader of a religious sect characterized by its disregard of the teachings of the past, its rejection of all forms, creeds, ceremonies, and tangible incitements to devotion, and for its purely spiritual worship, recently startled the world by the announcement that a new Church was required to meet the religious wants of mankind. From his own stand-point it was evident to him that there was "a suspense of faith" among Christians; a prevalent dissatisfaction with those theological refinements which exalted the spiritual at the expense of the material; a certain anxious looking for the revelation of a new mode of worship. Regarding man as a finite being, having senses through which he is to gain a knowledge of the external world, and in all his pursuits dealing with substance and not shadow, with material forms and not essences, he very rationally concludes that to meet the religious exigencies of at least his own denomination, they should return to those forms of worship which in the highest degree stimulated to devotion by an appeal to the senses. Accordingly he recommended the establishment of a Church with temples of the most imposing architecture, with altars smoking with burning incense, with music the most solemn, and ceremonials the most impressive. This theological philosopher, though advocating the most absolute changes in his own sect, reasoned from true premises, and came to logical, rational conclusions. Man has a spiritual and material existence so intimately blended, and mutually so dependent, that the one contributes constantly to the aid of the other in their normal and healthy action. His religious being cannot long subsist on the vagaries of the imagination, or the airy nothings of a speculative theology.

Medicine, like theology, has its transcendental worshippers. Rejecting the methods of investigation by which every other science is advanced, they adopt a dogma at once irrational and insusceptible of explanation, and upon this build up a theory purely imaginary. Whatever does not square with this dogma is to be rejected, though its practical value may have been proved. The acquired knowledge of the profession, however exact and true, is accounted as nothing, unless in harmony with this absurd principle. The history of medicine, in all that relates to its material interest, is obliterated, and a new era commenced. They thus discard alike the accumulated experience of the past, the discoveries of the present, and the aids by which nature and art are made to subserve the interests of science. To them pathology reveals no useful facts in the history of disease, and the microscope and organic chemistry are cast aside as useless methods of investigation. Withdrawing from the profane and vulgar touch of material objects, they seek to advance their knowledge of human maladies by studying the influence of intangible entities upon a diseased imagination. Causes are entirely lost sight of, in their anxiety to discover agents producing like results; symptoms are ascribed to the potency of the ultimate particle of inert substances; and the physiological termination of diseases is attributed to the elimination of a mythical cause by fabulous remedies.

It is not strange that an inquiring mind should at length sicken of such irrational pursuits, and turn from that pseudo-science which has only a retrograde movement, to that true science which daily unfolds new and hidden treasures to its votaries. It is only marvellous that an educated person could long occupy himself with studies so trivial, and investigations so unscientific and deceptive. We can only account for it, knavery aside, by the fact that medicine, in many respects, gives the greatest latitude for self-deception. But he who is firmly established in correct principles, and has the support of a sound judgment, can maintain his integrity while studying its most obscure chapters. We have ever been confident that educated persons adopting a system so destitute of merit, would finally become weary of its hollow pretensions, its inability to progress, and the unsatisfying nature of its studies.

There have long been striking evidences of a "suspense of faith" among the practitioners of this school. Discontent pervades its ranks, exhibiting itself in a universal tendency to abandon the intangible, imponderable, and imperceptible in remedies—the dogma dear to the heart of its founder. Silently many have returned to their old faith, while the majority have sadly back-slidden, and indulged clandestinely in the sin of employing old curative measures. The leaders have endeavored to meet this exigency, not by affectionate appeals to duty or stern reprimands for delinquencies, but by devising means of concealing from public recognition the real defection of their followers. Ingenious methods of disguising full doses of every important remedy, seemed for a time to answer their purpose; but there was a limit even to this device. Aloes and assafœtida could thus be administered in large doses without detection; but by what means could blisters, leeches, and the lancet, so long, so loudly, and so persistently denounced, be used, without utterly destroying the fabric which had been raised with so much labor and art! Even this point seemed to have been attained. A diligent inquirer set to work to determine upon what principles these three remedies acted, when, to the astonishment of himself and friends, he discovered that blisters and leeches acted purely according to the dogma of their school, and therefore were to be boldly employed. He also further ventured the assertion, that venesection would doubtless be found to act upon the same principle, if its action was thoroughly investigated, when the lancet would also be recognised as a legitimate resort in acute diseases. Here was a total abandonment of everything but the name, which has long passed for nothing. But even these concessions and compromises, it now appears, will not answer the exigencies of that school. The flimsy subterfuges which it raises will not long suffice to cover its nakedness. The larger body of its members require a new faith, and that faith will be RATIONAL, SCIENTIFIC MEDICINE.

Medicine, like theology, has always had its isms, which have, in various ways, and by multiplied deceptive charms, and insidious influences, enticed its members from its ranks. But these vagaries have proved unsatisfactory, and after a brief, but often brilliant existence, have been abandoned and forgotten. Indeed, the history of medicine presents a continued series of popular theories, which have for the time engrossed the attention, and then fallen into contempt. No age, however enlightened, can claim exemption from the prevalence of medical heresies, and experience seems to teach that, the higher the state of civilization, the more liability is there that absurd medical doctrines will be engendered. But humiliating as is this aspect of our profession, we may console ourselves with the reflection that medicine also, like theology, has always had its true Church, to which the footsteps of every honest seeker after truth finally tend, however far he may have wandered from the paths of rectitude.

THE WEEK.

THE importance of establishing large permanent military hospitals in the North, upon the coast where they shall be easy of access by sea, is very evident, and we are glad to see the Sanitary Commission have already anticipated the want. In a recent report on the hospitals in and around Washington, by Drs. VAN BUREN and AGNEW, we find this subject thus alluded to:—

> "In view of the inevitable accumulation of chronic cases of disease in the general hospitals near the seat of war in large numbers, and of the great advantages that would be secured to many of them by change to a Northern climate with sea air, and for many other equally important considerations, your Committee would suggest that the recommendation already made by the Commission as to the establishment of a general military hospital in the harbor of New York, be again urged upon the attention of the War Department."

That there is to be a large number of chronic cases which would be greatly benefited by this change alone, there can be no doubt. The transport would be easy by sea, as vessels returning from the seat of war are generally in ballast. We hope to see the suggestions of the Commission acted upon promptly, as typhus is already prevalent in the overcrowded hospitals at Washington.

IT is gratifying to notice the importance that our literary colleges are beginning to attach to physical education and personal hygiene. Amherst led the way by establishing a Chair for instruction in gymnastics, and Harvard is urging the appointment of a Professor of Hygiene. Says the President of that institution in his report for 1859-60:

> "It is much to be desired that, in connexion with this subject, a Professorship of Hygiene should be established. The services of a skilful and experienced physician, who shall act as the friend and adviser of the students, are greatly needed. Brought together from their homes, at a critical age, without the oversight of parents or family physicians, many, no doubt, fall into habits injurious to health, without being conscious of the dangers they are incurring; many are careless of precautions which are forced upon them at home; some are drawn into temptations with regard to eating, drinking, and smoking, which they need to be warned against. The College rules of order in some measure help to protect the students from these dangers; but a good physician in the department of hygiene, who, as professor, should give them instruction, by lectures or otherwise, at the commencement of the College course, and to whom they might resort in all cases of illness, whose advice they should have the right to ask confidentially on all matters relating to health, and who should exercise a controlling direction whenever a student appeared to suffer from bad habits, ignorance, or neglect, would be the best possible safeguard. The importance of such a professorship can hardly be exaggerated."

A New York Correspondent of the *London Med. Times and Gaz.*, thus gives his first impressions of Yankeedom:—

"Among other things, the way of eating here is positively painful. The Americans bolt their food, hot and cold, chowder, oyster-soup, roast and boiled meat, pastry, molasses, gélée, etc., *pele-mele*, without stopping to masticate or to speak, and no doubt this habit is in a great measure the cause of the enormous amount of indigestion which prevails in this country. This is, of course, greatly increased by the preposterous quantities of medicine taken. No trade flourishes so well in America as that of charlatans; one scarcely meets with an American whose pockets are not filled with pills, powders, mixtures, life elixirs, and universal panaceas, etc., prepared and advertised by quacks. These fellows make the largest fortunes, and live in the most magnificent style in this country. Opium, mercury, arsenic, and strong purgatives are the most common medicines. These and the tobacco-chewing which pervades all classes of society, are most detrimental to health, and have contributed greatly towards deteriorating the race. Those born in this country are sickly, slender, thin-legged, unhealthy, and lax-fibred; they are unable to do heavy work, which is almost exclusively performed by negroes, Irishmen, and Germans. The women are certainly pretty, but their beauty is of a delicate and somewhat of a languishing character; most of them being pale, nervous, and hysterical."

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The question of consultation with homœopathists is being discussed by the London journals, and the prominent surgeons are brought to account for their delinquencies. We last week quoted Mr. Fergusson's defence; we now give Mr. Brodie's note in reply to insinuations of consulting with these irregulars:—

"I feel confident that our Profession generally will do me the justice to believe that I would not, either directly or indirectly, do anything that would in any way sanction a system so absurd and nonsensical as I know the so-called Homœopathy to be.

"Having been in the habit of seeing, especially at my own house, many patients attended by Practitioners of whom I had no knowledge, I cannot say that I may not by accident have occasionally seen some one attended by a Homœopathist; but I have never knowingly done so; and I do not think that any well educated Medical Practitioner can honestly meet one of these Homœopathists in consultation. The only object of a consultation is to do good to the patient; and it is out of the question to suppose that any interchange of idea with one in whose professed opinions we have not the smallest faith, and whose notions, indeed, we cannot comprehend, can tend to this result."

Reviews.

Transactions of the Medical Society of the State of New York, for the year 1861. Albany, 1861, pp. 408.

(*Continued from page* 125.)

The First Report on *Medical Education*, by Professor Howard Townsend, of Albany, containing suggestions which we hope to see finally acted upon by our Medical Colleges, viz. a preliminary examination of the students as to their general educational qualifications; a longer and more thorough course at the medical schools; a final examination by an independent Examining Board. In our opinion this is a concise statement of the present demands of the profession.

The Second Report is on *Controlling the Use of Adulterated and Inefficient Medicines*, by Dr. E. R. Squibb, of Brooklyn. The remedy proposed is, that every practitioner devote sufficient attention to the tests of drugs, to make himself an inspector, and then patronize only those druggists who deal in pure articles. One test of impure drugs is their cheapness, and this test every physician can apply.

The Third Report is from the Delegation to the Convention for revising the Pharmacopœia, consisting of Dr. Edward R. Squibb, of Brooklyn, and Professors Howard Townsend, of Albany, and Caleb Green, of Homer. The Committee issued blank circulars of inquiry, as to the changes advisable in the pharmacopœia, to fifty-nine county medical societies of the State, from which they received ten returns. The Committee report briefly the action of the Convention.

The Fourth Report *On Medical Topography and Systematic Drainage*, by Dr. Elisha Harris, is one of the most elaborate papers in the volume. This report is valuable as laying the foundations for the permanent establishment of a Contract Board, having for its duties the surveillance of the sanitary interest of the State. It is shown that the different districts of the State are capable of drainage, to an extent which would materially improve the health of towns. But such great enterprises will not be undertaken and properly executed except under the direction and supervision of the Government. The State Government owes it to the people to institute such measures as will promote the public health. This labor it must accomplish through an enlightened Sanitary Board, as is done with such great success in Great Britain. The appendix to the report contains several letters, by gentlemen, relating to the subjects of inquiry in different sections of the State. Dr. Coates, of Batavia, gives an interesting topographical sketch of Genesee co., and portions of Wyoming and Orleans. Dr. J. G. Orton, of Binghampton, one of the committee, furnishes the vital statistics of the southern tier of counties, and gives the course of inquiry which he is pursuing, and from which we may anticipate hereafter valuable results. Dr. Moulton, of New Rochelle, contributes some facts in regard to the endemic diseases of that part of Westchester. The last communication is from the pen of Lieut. Vielé, of New York, and possesses unusual interest from the fact that its author is not only a distinguished topographical engineer, but is an intelligent student of sanitary science. His observations are limited to New York and Long Island, but his remarks are applicable to the State at large. The facts which he communicates in regard to drainage are of the utmost importance, and should awaken every resident of this city to the irremediable necessity of reform in our local improvements.

The last Report is *On Medical and Surgical Statistics*, by Dr. J. G. Orton, of Binghampton. The indefatigable chairman pursues the important objects of his commission with a zeal which we would gladly see others imitate. He has undertaken a most important work, and we trust the profession of the State will respond heartily and unanimously to his appeals for aid. No one should fail to return the blank reports furnished and properly filled. The remainder of the volume is occupied with biographies of deceased members and subjects more immediately relating to the Society.

Communications of the Rhode Island Medical Society, for the Year 1861. Published by the Society. Providence: 1861.

The fiftieth annual meeting of the Rhode Island Medical Society was held on the 14th of June, and has, therefore, attained to the honor of a semi-centennial anniversary. We allude to this fact with great pleasure, for it recalls long years of devotion on the part of the profession of that State to the cultivation of legitimate medicine, and to the maintenance of its social and scientific rank. State and County Medical Societies should be fostered by every means in our power, for it is through them principally, that the profession is united, strengthened, and elevated. We trust that this society is now but in its infancy, and that its good work in behalf of American Medicine is but just begun.

The first paper in the Communications is the address at the Semi-Annual Meeting, by H. G. Stickney, M.D., of Providence, *on the Relations of the Young Physician to the Profession and Public.* In this address the author points out some of the difficulties which the young physician has to encounter, and indicates the remedy; he urges him to educate the community in which he locates in the laws of disease and health, and not to despair of ultimate success. The second paper is a *Letter on some Points of Military Surgery*, communicated by the venerable Dr. PARSONS to Prof. HAMILTON, and which has been published by the latter in his work on military surgery. The next paper is on the *Carbonate of Potassa in Phagedæmic Ulceration*, by W. OWEN BROWN, M.D., of Providence. Dr. BROWN reports several cases in which he used this article as a local application, with the happiest effects. We have frequently used it in similar cases with the best results. He also adds to his paper two cases of scrofulous ophthalmia greatly benefited by the application of tincture of iodine to the lids. *A Case of Tubercle of the Lungs, resulting in Pneumo-thorax and Death*, is reported at length by THOS. K. NEWHALL, M.D., of North Scituate; it is a type of that class of affection. The last communication is a *Case of Interrupted and Renewed Lactation*, by J. H. ELDRIDGE, M.D., of East Greenwich. The patient, while nursing, was attacked with dysentery, and discontinued nursing for six weeks, after which she resumed it, and the return of milk was ample.

The communications close with an *Address on the Epizoöty, lately prevalent among Swine*, by EDWIN M. SNOW, M.D., of Providence, with the results of post mortem examinations, by G. L. COLLINS, M.D., of Providence. This highly interesting paper has been published in a separate form, and we shall take another occasion to notice it more at length.

THE PHYSICIAN'S POCKET, DOSE, AND HAND-BOOK; containing the Doses and Uses of all the principal Articles of the Materia Medica, etc. etc. By JOSEPH H. WYTHES, A.M., M.D. Third Edition. Philadelphia: Lindsay & Blakiston, 1861, pp. 244.

THIS little volume is a useful hand-book to those who may have occasion to improve their memories in regard to the preparation of remedies.

THE HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES. Edited by W. H. RANKING, M.D., and C. B. RADCLIFFE, M.D. Vol. XXXIII. January—June, 1861. London: Churchill, 1861, pp. 360.

THIS semi-annual publication is issued simultaneously with Braithwaite's Retrospect. It embraces, however, a much wider range of periodicals, and reflects more accurately current medical literature. The present number is one of the most valuable of the series.

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

BY E. H. JANES, M.D.

IMPAIRMENTS OF VISION CAUSED BY LACTATION.

THIS is the title of an article in the *Lond. Med. Rev.*, by George Lawson, Surgeon, etc. The author says that it is so common for some defect of vision to occur during the time that the mother is nursing her child, that few women who have borne many children have entirely escaped some of the slighter forms of this ailment, which may vary in intensity from a mere feeling of temporary giddiness to a state of incurable amaurosis. It may, in feeble women, manifest itself soon after confinement, while in the more robust it may not occur until many months after. He describes two distinct forms of the disease, in one of which the eye is directly affected, with sufficient manifestation of morbid action to account for all the impairment of vision of which the patient complains. In the other the defect appears to be central or cerebral, the appearance of the eye being nearly normal. In the first form the patient complains of her eye being bloodshot, of a feeling of giddiness, and of some intolerance of light. There is an inability to read long, as the lines become misty and the words run together; the eye looks inflamed, irritable, and watery, presenting very much the appearance of one from which a foreign body had been lately removed. It has a generally pinky appearance, and the ciliary veins are rather large, showing internal congestion. If the case be severe, the redness and impairment of vision increase until she is scarcely able to read large type; pupils sluggish, contracted, pulse quick and small, and other symptoms of exhaustion. The case is passive choroidal congestion dependent on anæmia, and on an exhausted condition of the nervous system produced by suckling. In the second form there is in the early stage in the superficial appearance of the eye, beyond the pallor of the conjunctiva corresponding with the anæmic look of the patient. Giddiness, lassitude, muscular debility, plainly indicate the drain produced by lactation. Impairment of vision increases, if the case is neglected, until complete amaurosis is the result.

The treatment consists in at first removing the cause, and such general tonic and sustaining treatment as each individual case may require. If there be choroidal congestion with photophobia, strong light should be excluded, cold applications employed, and the bowels kept open by some mild alterative. If the congestion extend to the iris, and a chronic choroido-iritis is produced, mercurials are undoubtedly indicated; but in all cases quinine and iron with nourishing diet seem to afford the greatest relief. Suckling of course must be absolutely forbidden. Several cases are reported.

A New Salt of Iron and Quinine.—Dr. Fergus, in a letter to the *London Med. Times and Gazette*, introduces a new combination of iron and quinine which he has used with very satisfactory results. He says, perhaps, without exception, the sulphate is the most practically useful of all the salts of iron, owing to the uniformity of its composition; and of the quinine salts, the sulphate is most available for general purposes. It is not difficult to form a simple combination of these two sulphates; but the resulting compound is not well fitted for general use. The addition, however, of a certain proportion of sulphate of magnesia enables us to obtain a salt which is nearly as soluble as the sulphate of magnesia itself—quite unalterable in the solid state, and forming a solution, perfectly clear at first, and remaining so for an indefinite period. The proportion of the three sulphates adopted is 80 per cent. of sulphate of magnesia, 15 per cent. of sulphate of iron, and 5 per cent. of sulphate of quinine, 1 scruple containing 16, 3, and 1 grains of the respective salts. The proportion of quinine may be increased by prescribing an additional quantity, which is readily soluble in a solution of the salt. One peculiarity is especially deserving of notice, namely, that in this combination the assisting or adjuvant property of both iron and quinine are remarkably developed; the effect of both, particularly quinine, being heightened in a very marked manner. At the same time, both the remedies are less apt to disagree with peculiar constitutions which ordinarily refuse to tolerate either iron or quinine. If the heightened power be borne in mind in prescribing this combination, there will be very few cases found in which it will not be suitable whenever either iron or quinine is indicated.

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HEREDITARINESS OF EPILEPSY.—M. Petit, Physician of the Asylum of the *Loire Inférieure*, from his own observations and the examination of the statistics of other writers, comes to the conclusion that epilepsy is quite exceptionally hereditary, and when such transmission does take place, it seems to do so more frequently on the side of the mother than that of the father.—*Moniteur des Sciences Méd.*, No. 26.

Correspondence.

HINTS FROM EUROPE.—THE ARMY SURGEONS.

[To the Editor of the American Medical Times.]

Sir:—I have read the abstract of a report on Military Surgery, in your valuable Journal of July 20, signed by Dr. Post and Dr. Van Buren. I think nothing could be better. All the suggestions are wonderfully in accordance with the latest deductions of surgery as seen in the Crimea, at Solferino, etc., as now well understood, after much trouble, by our best London surgeons at present. As to the result of primary amputations at the hip-joint, the committee is right, but I think they will find that this amputation succeeds as a secondary operation very well, if the patient is removed away from the field of battle for a month and well fed. As to chloroform, they will find it invaluable; it lessens the shrieks and cries of those operated on, and thus lessens the fright and depressing emotion of such evils on those whose turn comes next to be operated on. A piece of a shell, four pounds' weight, has been extracted from the muscles of the thigh, and amputation at once performed under chloroform, and perfect recovery of the soldier; this and such like cases would be impossible without chloroform: it is an excellent plan to use chloroform in the open air: half a glass of brandy, or a cup of coffee, given previously, steadies the action of the heart. The only cases where caution is required, is where delirium is present this should be lessened first by a dose of morphia. It is well established now in Europe, that death by chloroform begins by a sort of spasm or stoppage of the action of the respiratory muscles; these should be watched. The first dangerous symptom in the administration of chloroform, is *a protrusion of the eyeballs*, and a state of the patient as if in a trance, or *state of religious ecstasy;* the respiratory muscles are stopped, the heart still beating vigorously. If this state be neglected, the respiration having stopped, the right side of the breast becomes engorged, and subsequently the heart stops by distension of its cavities: tracheotomy, as in the Crimea, done on the instant, has saved such a patient, but usually, if danger seem impending, fanning cold air on the face, and removing the patient more into the open air, succeeds.

Tetanus is a disease in which chloroform will prove of immense utility, joined to strong broths and jelly; if the patient lives over twenty days, so as to allow the torn nerve to heal, he will probably recover: dividing the nerve between the wound and next ganglion is also beneficial. In lock-jaw, the hypodermic use of conia would probably prove very valuable: after Waterloo, the most fatal and frequent complication of the cases was by tetanus, again at Solferino, but it was nearly unknown in the Crimea, so that it is difficult to lay down any prophylaxis, or to say what gives rise to it; probably exposure of soldiers, when wounded, to the night air on the field, is one of the commonest causes. Erysipelas is well treated by wine and quinine. Pyæmia by aconite. Hospital gangrene (like strawberries and cream) by nitric acid locally. Phagedæna by opium and fermenting poultices. The recent fight at Bull Run has engendered a feeling of great sorrow and sympathy for your surgeons, and at this side of the Atlantic, in Ireland and England, we can only offer them hints such as these are. Yours, a constant reader,

Charles Kidd, M.D.

London, August 12, 1861.

[We learn from Dr. Kidd that he visited the hospitals of Paris in the revolution of 1847–8, and assisted Roux, Velpeau, etc., in treating sixteen hundred gunshot wounds, ten thousand of the insurgents having been killed, as described in the *Medical Times and Gazette* of that year; that he has, since 1850, edited the "Mirror" of Hospital Reports of the *Lancet*, and has almost lived in the London Hospitals; that he has seen in all over ten thousand applications of chloroform by inhalation, so that he does not offer these hints without some reason. His approval of the report of Dr. Post and Dr. Van Buren is of the strongest kind; and he states that it quite astonished surgeons for its ability and information. In the Crimea, he concludes, chloroform was forbidden by the English authorities, till he, Dr. Kidd, and others cried out against such barbarity, and appealed personally to Mr. Syme to use his influence with some Scotchmen in office.—[Ed. Med. Times.]

MEDICAL GRADUATES UNDER TIME.

[To the Editor of the American Medical Times.]

Sir:—Two of your correspondents have alluded to the graduation of medical students at New York schools after two years', or less, study. They both, evidently, refer to the same school, and that is one of the oldest and most respectable in your city. No one can be in doubt as to the school charged with this delinquency, and the profession would be gratified to know what apology can be rendered for such gross neglect of duty; for it is certainly its duty, according to its own regulations, to inquire strictly into the qualifications of its candidates for graduation.

But I do not myself believe that the school referred to is alone in this matter; many (I fear all) of the schools throughout the country are equally negligent of the time which their candidates have studied. They are all possessed with that pernicious idea, that the prosperity of a school is judged by the *number* of its graduates. It were well if by any means this belief could be eradicated from the minds of our medical teachers. I see but one way in which this can be accomplished, and that is, by making our medical institutions State property, giving professors a fixed salary, and having an independent Examining Board as in this State.

Yours, etc., Mich.

Aug. 27, 1861.

ALLEGED OBJECTIONS TO AMPUTATION AT THE ANKLE-JOINT.

[To the Editor of the American Medical Times.]

Sir:—In looking over the Transactions of the Medical Society of the State of New York, kindly sent to me by a friend, I was surprised to find the following objections raised against the operation known as "Syme's amputation at the ankle-joint," by Dr. Bly, of Rochester:—

"Since the artificial leg has been brought to such perfection, there are reasons which weigh heavily against this operation. The ankle-joint in the artificial leg should correspond with the one of the natural leg, but cannot in this case, on account of the length of the tibia and fibula. To get a good fit with an artificial limb, the stump should be conical, or at least it should not be larger at the end than it is higher up, as it renders a portion of the interior of the artificial too large, if made large enough to allow the bulbous extremity to pass through. Or if the leg is made to bear up, even then the ankle is necessarily large and clumsy.

"It has been supposed that by this operation the patient would be enabled to take the most if not all his weight upon the end of the stump, but the few cases which I have seen do not sustain the supposition. I have not seen one that could support the whole weight on the end of the stump, though some of them could sustain some, not enough, however, to counterbalance the difference in the substitutes, while some cannot bear any more than those who are amputated higher up. Therefore, when amputation becomes necessary which would sever the flexors of the foot, it should be performed a sufficient distance above the ankle-joint, to admit of an artificial substitute with an ankle-joint of the most perfect construction now attained.

"The junction of the middle and lower third of the tibia is the lowest point at which amputation of the leg can be performed, and give sufficient room for the construction of a good, substantial, and graceful artificial limb with an ankle-joint of the most recent improvement. It also gives a stump of as much length as is of any service to the patient; therefore, the junction of the middle and lower third of the tibia should be the *first point of election*, whenever the flexors of the foot cannot be saved."

Dr. Bly is a practical artificial leg-maker of reputation, and his opinion is entitled to the most serious consideration. Having had some experience in this operation, and the adaptation of artificial limbs to the stump, I shall venture to question the correctness of the opinions above put forth. In the first place, amputation at the ankle-joint is much safer than that through the leg, the former being rarely, if ever, fatal. The inability of the patient to sustain his weight on the stump is not true in my experience; on the contrary, I have seen a patient bear his weight on this stump on the fifteenth day after the operation. I have never heard a patient even complain of tenderness of the stump after resuming active business. One person, a peddler, stated that he often walked eight or ten miles per day without any inconvenience, having merely a coarse shoe fitted to the stump.

The question which Dr. Bly raises, as to the difficulty or impossibility of adapting a serviceable artificial limb to the stump, it is not my province to discuss; but I may say, that I have seen a case fitted by Palmer & Co. so perfectly, that the more recent friends of the patient did not know, after a year's acquaintance, that he had an artificial limb. I believe, therefore, that this objection is as groundless as the former.

Yours, &c.,
J. C.

Aug. 17, 1861.

SUSTAINING THE PERINEUM.

[To the Editor of the American Medical Times.]

Sir:—In the Medical Times of Aug. 17, Dr. E. M. Hunt lays down the following proposition:—"Pressure prevents tearing or fissure" of the perineum during labor. I am not prepared to deny this statement, but it is contrary to my belief and practice. Let me ask Dr. Hunt, *how* pressure on the perineum can prevent fissure?

Yours, &c., E. C. Holton, M.D.

Aug. 26, 1861.

RENUNCIATION OF HOMŒOPATHY.

[We are requested to publish the following declaration, with the explanation, that the gentlemen whose names are attached have all been until recently homœopathic practitioners in this city.—Ed. Med. Times.]

New York City, 1st July, 1861.

We, the Undersigned, believing that the true vocation of the medical profession consists in preserving life and health by any and every means offered, and believing furthermore, that the facilities for such end are limited by allegiance to any form of medical sectism:

Therefore do herein declare ourselves henceforth absolved from any and all medical sects, reserving to ourselves the legitimate title of Physicians and Surgeons.

With this declaration we also take occasion to express our reverence and firm adherence to those time-honored ethics of our profession which render secure the confidence and welfare of the patient, and exact honest and honorable intercourse between its members.

Ed. P. Fowler, M.D., 84 East 15th St.
Wm. Faulkner Browne, M.D., 58 East 16th St.
W. O. McDonald, M.D., 1st Reg. U. S. Chasseurs.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

War and its attendant alarms affect the medical equally with other professions. The universal cry among the brethren shows the difficulty they experience in obtaining their well earned fees. Is it to be wondered at that a general stampede has occurred, and that in every direction, the young and old are volunteering, or going with the regular army? When the first call came for our troops, not only were the medical posts in each regiment eagerly sought for and quickly filled, but many, including students who could not hope to obtain a medical recognition, shouldered the musket, and fell into the ranks as privates. Our medical schools will present a beggarly array of empty benches, if we may judge from present indications. I learn that some of the professors are calculating the probability of their being compelled to decline lecturing at all.

A-propos of schools, I see you have not yet heard of our *émeute*. The "faculty of the Pennsylvania school is being reorganized," so says one of your contemporaries, which means literally that said faculty have resigned *en masse*. There is a vast deal of unwritten history connected with that school, which would be decidedly refreshing if spread before the medical world, and which, perhaps, may one day be unfolded by your correspondents.

Judging by the size of their class last winter, and by the number of physicians who were attracted to the lectures, particularly the vivisections by the Professor of Physiology, a brilliant future was predicted by the friends of the institution. At present it will scarcely be possible to survive this last blow, as the work of finding a new faculty, and one willing to hazard so much as will be necessary this winter, and at least for some two or three years to come, is one of no ordinary magnitude. Thus has fallen another prop of the medical capital. Will the others survive the shocks which are shaking the Union to its foundations, and fast sweeping away its ancient landmarks? One fact forces itself upon us, that medical teaching in the large cities has culminated, and is fast descending in the Western horizon.

In more than one of our hospitals, etc., resignations have been received from their physicians who have gone to the field of battle, thus creating vacancies which have long been hoped for by outsiders. It is presumed, therefore, that these positions will speedily be filled, and we understand that in some instances it may be necessary to consider at some length the claims of the various candidates.

It would seem that *quackery*, or *irregularity*, as it is more elegantly termed, has been recently revived, and appears now to possess an amount of vitality not dreamed of by the profession. Thus it has been seriously proposed to introduce homœopathy into one of our prominent hospitals, on account of its *cheapness*, and also that those who prefer it may be thus treated. But of this, more anon.

Again, we find the brethren studiously seeking every opportunity to emblazon their deeds on high, and happy the man who may have a friend at court in the shape of a reporter. Those who prefer to avoid even the appearance of advertising were astounded by the report in a daily paper of an operation by "the skilful surgeon ———," a man who has occupied a prominent position before the medical public. Can we then exclaim at others, younger in the profession, with everything to gain, who may unwittingly offend by a modest announcement that they "attend the families of volunteers gratis;" or that a physician to one of our dispensaries should come out with a circular, which he profusely scattered through a certain district, thanking his patients for their patronage, and asking a continuance, &c.? By the way, Mr. Editor, I think I shall send you a copy for publication, as he was kind enough to send them to certain physicians and apothecaries, as well as every one else in his neighborhood.

The new building of the Episcopal Hospital is fast approaching its completion, and will add another and important member to the list of these institutions. Much credit is due to all connected with it, but more especially to the members of its medical board, who have worked untiringly in the perfection of their object. As I do not wish to fall into an error against which I have just been declaiming, and as I know the modesty of these gentlemen, I will not mention names.

Hoping to have another paper talk soon, I remain,
Yours, &c. A. M. Leon, M.D.

August 27.

FOREIGN CORRESPONDENCE.

[Letter from David P. Smith, M.D.]

LONDON.

May 2.—To-day, at the University College hospital, I saw Dr. Walshe. He is evidently a most painstaking observer of nature. Two practical observations that he made are worth recording: showing a case of hemiplegia which he judged to proceed from capillary apoplexy, he remarked, that the entire flaccidity of the limbs did not positively point out the absence of softening, for he had recently had a case in the hospital, characterized by no contraction, where after death extensive softening was proved to exist. A very curious case of chorea affecting mainly the respiratory muscles showed by its treatment and his remarks that he considers it almost a self-limited disease.

May 3.—To-day I had the pleasure of listening to a very interesting lecture upon scarlatina from Dr. Jenner. He combated the prevalent notion that a plentiful eruption rendered the disease more manageable, and maintained there was no ratio between the amount of disease and the rash. For the throat affection he advised the application of the solid nitrate of silver, having found it in solution of no avail. When there was ulceration of the fauces, and, consequent upon that, enlargement of the lymphatic glands, he had found the solid nitrate, rubbed freely all over the throat, of the most signal advantage. In bad cases he considered patients could often be saved by very constant and assiduous syringing out of the throat with antiseptic solutions. For the secondary fever which sometimes follows scarlatina he had found quinine the most successful remedy.

Among other surgical cases in this hospital, we were shown one where the operation of the late eminent Prof. T. D. Mutter for relief of contraction from burns situated upon the throat had been tried, with this difference: the interposited flap of skin, instead of being taken from the healthy arm, was, very curiously, taken from the breast, although it had suffered severely from the burn. Sloughing had occurred, and in this British bungling with a beautiful and successful transatlantic operation the "rent was made worse." A case of chronic cystitis was shown, where a blister over the os pubis had done no good. A case of excision of part of the tarsal bones was shown me, and also a case of excision of the wrist. They were of course doing well, and had been doing well for a year or two. It is a rather remarkable circumstance that every instance of excision of these small joints that I have seen has been *doing* remarkably well, but showing no signs of *getting* well. It would be well perhaps if the scripture injunction in regard to offending members was sometimes carried into effect in these cases.

May 6.—This noon I witnessed an interesting case under care of Prof. Erichsen. The patient had just been admitted, and, when the professor came to him in his round and asked him what was the matter, said he passed water too freely. This of course meant too often, and, on further examination, he was found to have much tumefaction in the perineum, great œdema of the scrotum and prepuce, while his bladder rose to within two inches of the umbilicus. It being impossible to find the orifice of the urethra, a director was passed under the swollen prepuce up to its reflexion upon the glans, and a free division made by a curved sharp-pointed bistoury. The glans being thus uncovered a catheter was attempted to be introduced, but, after passing through a stricture near the meatus, it met an obstacle in the perineum. The patient was then placed in the attitude for lithotomy, a free incision made in the mesial line from which pus in large quantity spirted forth, and also smaller incisions made in the scrotum, from which serum oozed out plentifully. The finger placed in the mesial incision failed to guide the catheter into the bladder, although strenuous, and it seemed to me, after having witnessed the gentleness and adroitness of Civiale, very severe attempts were made. Next, the catheter being introduced as far as possible, an incision was made upon it, and the urethra fairly cut into, as evidenced by the copious discharge of urine and rapid subsidence of abdominal tumefaction. Even now, after prolonged trial, Prof. Erichsen totally failed to introduce a catheter into the bladder, either through the penis or through the perineal section. However, the urine had now a free exit, and the man was left in a comfortable state.

Army Medical Intelligence.

Brigade Surgeons.—The following is the official list of Brigade Surgeons appointed under the new law, after examination by the Medical Board. The date of appointment is August 3d, with all but the last five:—George H. Lyman, Massachusetts; F. H. Hamilton, New York; Henry S. Hewitt, New York; J. H. Brinton, Pennsylvania; John A. Lidell, New York; John C. Dalton, Jr., New York; George Suckley, New York; Henry Bryant, Massachusetts; P. W. Ellsworth, Connecticut; Luther V. Bell, Massachusetts; S. W. Gross, Pennsylvania; David Prince, Illinois; A. H. Hoff, New York; W. H. Church, New York; Joseph W. Freer, Illinois; Rufus H. Gilbert, New York; J. E. Quidor, New Jersey; Charles McMillan, New York; Charles O'Leary, Ohio; J. G. F. Holston, District of Columbia; A. R. Campbell, Pennsylvania; J. V. Z. Blaney, Illinois; Thomas Sim, Illinois; J. S. Bobbs, Indiana; Peter Pineo, Massachusetts; William E. Waters, District of Columbia; O. Martin, Massachusetts; J. H. Banch, Illinois; William B. Stuart, Indiana; N. R. Derby, Pennsylvania; Daniel McRuer, Maine; S. R. Haven, Illinois; A. E. Stocker, Pennsylvania; J. Owen, Pennsylvania; W. C. Thompson, Indiana; James King, Pennsylvania; T. Rush Spencer, New York; J. D. Robinson, Ohio; William Clendenin, Ohio; George G. Shumard, Ohio.—Total, 40.

Medical Directors.—The following appointments have been made:—Surgeon Charles S. Tripler, Medical Director of the Military Department under Maj.-Gen. McClellan; Surgeon J. M. Cuyler, Medical Director of the Military Department under Gen. Anderson; Surgeon S. G. J. Decamp, Medical Director of the Military Department under Maj.-Gen. Fremont.

Assist.-Surgeon W. K. Scofield, U.S.N., has been detailed for duty on the U. S. Receiving Ship Ohio, at Boston, Mass., in place of Assist.-Surgeon A. S. Oberly, who has been transferred to the U. S. Frigate Sabine.

Department of Eastern Virginia, Aug. 16, 1861.

We, the undersigned, medical officers of the volunteer forces in and about Fort Monroe, having noticed in the American Medical Times, of Aug. 10, an article under the signature of Gilman Kimball, stating that there prevails at this post a *marked prejudice* against the service of Volunteer Surgeons, deem it our duty to correct as far as we can the erroneous impression thereby conveyed.

It gives us pleasure to say that our official intercourse with the Medical Director and his associates has always been characterized by a kind, prompt, and efficient discharge of their duties, and our private relations have been of the most agreeable character. We have yet to learn that there exists towards us any other than a feeling of cordial professional fellowship.

We regret to add that the management of the General Hospital at this post, under Dr. Kimball, has not been such as to inspire us with confidence.

(Signed.)
J. L. Hicks, Surgeon, 1st Reg. N. Y. Vols.
John Howe, Assist. Surgeon, 1st Reg. N. Y. Vols.
Reed B. Bontecou, Surgeon, 2d Reg. N. Y. Vols.
Le Roy McLean, Assist. Surg., 2d Reg. N. Y. Vols.
A. M. F. Eisenlord, Surg., 7th Reg. N. Y. Vols.
J. Jæckh, Assist. Surg., 7th Reg. N.Y. Vols.
G. H. Humphreys, Surg., 9th Reg. N. Y. Vols.
J. W. Hunt, Surg., 10th Reg. N. Y. Vols.
F. W. Doolittle, Assist. Surg., 10th Reg. N. Y. Vols.
Alex. H. Hoff, Surg., 3d Reg. N. Y. Vols.
Jul. Hausen, Surg., 20th Reg. N. Y. S. Vols.
Charles Heiland, Assist. Surg., 20th Reg. N. Y. S. Vols.
Johnson Clark, Act. Surg., Mass. Battalion.
John C. Bogardus, Surgeon, Union Coast Guard.
John J. Van Rensselaer, Assist. Surg., 3d Reg. N.Y. S.V.
Rufus H. Gilbert, Surgeon, 5th Reg. N. Y. S. Vols., Advance Guard Zouaves.
B. Ellis Martin, Assist. Surg., 5th Reg. N. Y. S. Vols.

STATISTICS OF SICKNESS AT FORTRESS MONROE.

Fortress Monroe, Va., Aug. 14, 1861.

[Army Correspondence of the American Medical Times.]

The following figures are taken from the reports for the month of July, of the Surgeons of this post, which includes all the regiments remaining in and near the fortress, and also those at Newport News.

There were reported, July 31, 6847 enlisted men, and 343 officers. There have been, including the 518 cases remaining on the sick lists, on the 1st of July, 4210 under medical treatment during the month; 93 of these were sent to the General Hospital; 3361 were returned to duty, 13 were on furlough, 206 were discharged from service, and 5 have died. There remained on the sick lists 318 convalescents, and 212 still under treatment.

There were 20 cases of congestive fever; 10 of continued; 89 of intermittent; 11 of remittent; and 27 of typhoid. There were 2 cases of erysipelas; 24 of rubeola; 1 of varioloid; 18 of cholera morbus; 69 of colic; 211 of constipation; 1209 of acute diarrhœa; 23 of acute dysentery; 1 of enteritis; 5 of gastritis; 2 of acute hepatitis; 6 of parotitis; 24 of tonsillitis; 95 of acute bronchitis; 51 of catarrh; 5 of hæmoptysis; 8 of laryngitis; 7 of phthisis pulmonalis; 3 of pleuritis; 8 of pneumonia; 3 of pericarditis; 10 of sunstroke; 149 of acute rheumatism; 63 of chronic rheumatism; 49 of gonorrhœa; 3 of nephritis; 9 of orchitis; 26 of syphilitic bubo; 15 of syphilis primary; 26 of syphilis consecutive; 53 of phlegmon; 162 of wounds; 77 of contusions; 2 of fractures; 34 of ophthalmia; 3 of otitis; 5 of otorrhœa.

The remaining cases were mostly unimportant and miscellaneous in character.

Of the deaths 3 were from gun-shot wounds; 1 from typhoid fever; and 1 from phthisis pulmonalis.

At present the tendency to diarrhœa and dysentery seems to be abating somewhat among the troops, while fevers seem to be increasing. I am told by those who have lived a length of time in this climate, that it is unusual for bowel troubles to be of importance after the middle of August or 1st of September, while it is *the* season for fevers.

The medical department at this port, so far as the intercourse of the regimental Surgeons with each other and with the Medical Director and his assistants is concerned, has been of a nature the most amicable and gentlemanly. I do not believe there is a Surgron of the volunteers in this Division of the army, who will not remember with pleasure his intercourse, both professional and social, with Dr. Cuyler.

Relative to the General Hospital, I am happy to say that there are but few patients therein.

John W. Hunt,
Surgeon 10th Reg. N. Y. Vol.

RESULTS OF VACCINATION OF THE 37th REG. N. Y. VOL.—STATISTICS OF DISEASES.

Bellevue, Alexandria, Va. Aug. 20, 1861.

[Army Correspondence of the American Medical Times.]

A copy of the following report was sent to the Surgeon-General of the State of New York, and another to the Surgeon-General, U. S. A., some time ago, as soon after the vaccination as the results could be ascertained. I then laid aside a copy for the *Times* also, but, owing to the confusion inseparable from the hasty movements of a marching regiment, this was mislaid. I now take the first opportunity of submitting it to you.

Wm. O'Meagher, *Assist. Surgeon.*
37th Regiment N. Y. V.

July 16, 1861.

To the Surgeon General.

Sir:—In obedience to General Orders, No. 4, I hereby submit a report of the 37th Reg. N. Y. V., and a special report on its general sanitary condition:

Vaccination—Total number vaccinated, 625.

Number not previously vaccinated, 125; number previously vaccinated, 403; number previously inoculated, 33; number of those who had had small-pox, 64. Total number, 625.

Out of the whole number, vaccination succeeded in 157 cases, of which 11 had been previously inoculated, 3 had had small-pox, and 111 had not been protected in any manner. The ages of those in whom vaccination was successful ranged from 19 to 35. The virus was abundant, and perfectly satisfactory, having been furnished by Dr. Loines, Resident Physician of the Eastern Dispensary, New York.*

Special Report.—The sanitary condition of the regiment has been good, with slight exceptions. The encampment at 95th street, New York, I regard as subject to miasmatic influences, as demonstrated by several cases of miasmatic fever. We had, at that place, many cases of rubeola, brought thither by a company detailed to us from the interior of the State. I consider the Battery encampment as unfavorable to a good sanitary condition, for the following reasons: The enlargement was made by dumping street garbage, manure, etc., which are now undergoing slow decomposition, and emitting offensive and injurious exhalations; added to which is the aggravated nuisance of dead animals and offal deposited on the shore by the tide. These combined causes would be most prolific in generating cholera, did an epidemic tendency exist. A special evil of the latter place is the facility for drunkenness, and the opportunity for contracting venereal diseases.

Our present encampment at the foot of East Capitol street, Washington, is situated on the extreme limits of the city, on high ground adjacent to the Eastern branch of the Potomac—the Anacostia—which is on one side margined by a wide marsh. Drinking water is obtained from a spring of a decidedly ferruginous character, which at first produced diarrhœa. The nights are cold, and the dews heavy, inducing a peculiar sense of damp-chilliness. The rains have been heavy and frequent, inducing rheumatism, catarrh, etc. The prevalent diseases have been: diarrhœa, from which we have all suffered more or less, cholera morbus, a few cases of simple dysentery; but all the diseases were more or less influenced by the surrounding miasma, requiring, in almost every case, the addition of quinine to the other appropriate remedies. The casualties have been, so far, few in number.

There have been no deaths from any cause. Our medical supplies from the U. S. Purveyor, and from the N. Y. Medical Association, were liberal and good.

Respectfully yours,
J. McNulty, M.D., *Surgeon.*

Monthly Report of the Sick and Wounded of the 37*th Reg. N. Y. V., for July* 1861.

Stations, Washington, D. C., and Alexandria, Va.

Diseases.—Febris, 8; febris intermittens quotidiana, 8; febris remittens, 1; cholera morbus, 16; colica, 1; constipatio, 10; diarrhœa acuta, 159; dysenteria acuta, 6; dyspepsia, 2; hepatitis acuta, 2; tonsillitis, 6; bronchitis acuta, 3; catarrhus, 15; phthisis pulmonalis, 1; pleuritis, 3; varicocela, 1; varix, 1; epilepsia, 1; ictus solis, 1; neuralgia, 2; alia similia, 1; bubo syphiliticum, 2; gonorrhœa, 6; ischuria et dysuria, 1; orchitis, 1; syphilis primitiva, 2; syphilis consecutiva, 3; hydrocele, 1; rheumatismus acutus, 12; abscessus, 1; paronychia, 2; alia similia, 2; ambustio, 1; contusio, 3; fractura, 2; hernia, 1; subluxatio, 7; vulnus incisum, 3; vulnus contusum vel laceratum, 7; vulnus punctum, 1; vulnus sclopetarium, 4; cataracta, 1; ophthalmia, 7; otitis, 5; bubo simplex, 1; debilitas, 55; ebrietas, 2; hæmorrhoid, 1; morbi cutis, 5; odontalgia, 3; tumors, 1. Total, 391. Regimental number, 800.

J. McNulty, M.D., *Surgeon.*

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* The vaccination was done while the regiment was encamped at the Battery, New York, June 24, and up to the present (Aug. 20) not a single case of small-pox has made its appearance.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VII.—Part I.

Gastro-intestinal Canal.—Vomiting.—Its Physiological and Pathological Causes.—Catarrh of the Stomach.

The gastro-intestinal canal of infants and children is very liable to diseases; among the causes of which irritants, helminthes, hot weather, sudden changes of temperature, nervous disorders, and rachitic, scrofulous, and tubercular dispositions take a prominent place. Dentition, too, is considered to be a principal cause of anomalies in both functions and structure of the stomach and intestines. Of these two the former suffers decidedly less than the latter; for a large number of severe diseases of the stomach, which prove very troublesome in advanced age, require time, while deep-seated disorganizations and thoroughly disordered functions of the intestinal canal are by no means rare. It is worthy of notice, however, that almost all the affections met with in the gastro-intestinal canal, are found on or in the mucous membrane, the muscular and peritoneal layers showing less tendency to derangements. Now, the affections of the mucous membranes are of a more or less singular description, catarrh and inflammation, with their consequences, being the prominent pathological processes really observed. The series of phenomena visible to superficial inspection are equally simple and uniform; vomiting and diarrhœa, with occasional pain, and several other less prominent symptoms, have alone attracted constant and undivided attention. They have been brought in connexion, more than any other, with the process of dentition, and it is certain that there are no symptoms appearing more frequently during its course. It is therefore of particular importance to consider these two symptoms at some length, in order to learn their importance either as symptoms or dangers of dentition.

I have applied to both vomiting and diarrhœa the term of symptoms, wishing to impress upon you this fact, that they are no more real diseases than pain, or cough, or convulsions, or any other affection that may be produced by a number of different causes, although showing a similar character in different cases. Let us consider first, therefore, how vomiting may originate in infantile age, and of how many conditions of the body it may be a consequence and symptom; we shall then be better able to trace its connexion with dentition to its proper source.

Vomiting is a very common occurrence in infantile age, and in a large number of cases is anything but a disease, or symptom of disease. The stomach of the newly born is small, holding but a few spoonfuls of liquid when undilated; it remains for some time in its fœtal state, in which the two curvatures exhibit but a slight difference in length; its position in the abdominal cavity is vertical instead of horizontal, and its appearance more like that of a dilated part of the intestinal tract than the stomach in the adult. It is entirely covered by the liver, which, from being the centre of circulation in fœtal life, is exceedingly large in early age, so much so that its left lobe nearly equals the size and weight of the right, and extends as far as to cover the upper portion of the spleen. Therefore the stomach will throw off its contents in early infantile age without any affection of the organ itself. A simple pressure over the stomach, shaking or tossing, tight bandages, and an over amount of breast milk swallowed, are amongst the most frequent causes of vomiting in early age. It can scarcely be called vomiting, it is more like an overflowing after overfilling; the usual symptoms of genuine vomiting, exhaustion, small pulse, paleness, and faint feeling, are not observed. So easily, indeed, will the stomach eject its contents that emetics, whenever given, will also act without the protracted disagreeable symptoms always observed in adults, and that the mother is accustomed to consider the throwing up of milk, in the nursling, as a very favorable symptom. It has become proverbial almost all over the world, that infants throwing up most will thrive best. Although this opinion can easily be reduced to its proper value, viz. that it is due to the abundance of proper food such infants have, etc., still it shows that no immediate serious injuries result therefrom. It follows, moreover, from what I have said of the causes of this throwing up, that nothing is more easy than to avoid it as far as it can be influenced by external means. If you avoid pressure on the epigastric region by both hand and dress, and allow the nursling to enjoy undisturbed quiet after taking his meal, disturbing him no longer than is necessary to cleanse his mouth, forbid tossing and shaking, and carrying in prone position, and take care not to overfeed him, you will not witness this symptom frequently.

Thus far vomiting has appeared to be almost a normal function, or rather the result of a mild external influence without any disease or disorder. Of a similar character is the occurrence of vomiting in a child a little advanced, as when, for instance, severe attacks of coughing have the same effect. The vomiturition and vomiting in hooping-cough are mostly of a mechanical character, being caused by the spasmodic pressure of the diaphragm and abdominal muscles, and thus far show no connexion with either a local disease or a general affection. They are, therefore, not attended with danger, except that resulting from the diminished introduction into the system of well digested food.

In cases where the fœtal position of the stomach remains unchanged in later life, habitual vomiting is a common symptom. This symptom is not of much consequence, and proves more troublesome than dangerous. Other mechanical causes are not so harmless; as obstinate constipation, which will sometimes produce antiperistaltic actions of the intestinal canal, and obstructions impeding its permeability, as incarcerated hernia, umbilical, inguinal, or femoral, and invaginations of the intestines.

Too large an amount of food irritating the stomach, has been pointed out as a cause of vomiting. But the quality of food acts in a similar manner. Inappropriate food will certainly not be borne by the stomach for any length of time, nor will irregularity in the time of feeding small children agree with the normal functions of the infantile digestive organs. We hear, occasionally, of cases in which mental emotions in the nurse, with their influence on the constitution of the milk, proved the source of serious disease, or even of death, to the child; and those cases in which a direct and palpable change in the elements of food has taken place, are unfortunately too numerous not to be known to any young practitioner. The nature of the undigested contents of the stomach brought up, will frequently explain the cause of vomiting. When milk is vomited, coagulated, immediately after being taken, it shows that either the milk or the stomach contained free acid. It is of some practical importance to know that this occurrence may be usually avoided by adding a small quantity of bicarbonate of soda, besides a little chloride of sodium, to each meal. When the milk is vomited some time after it is taken, in a state of loose coagulation, it proves that the condition and function of the gastric juice are normal; when, on the contrary, it comes up again after some time has elapsed, uncoagulated, there is either a want of gastric juice that requires the administration of pepsine; or, if the caseous matter looks like tough mucus, there is evidence that chronic catarrh is present, in which case pepsine is of no use.

Vomiting due to the condition of the stomach and the ingested food, is most frequent, and it may be safely stated that such cases depend upon organic disorders of the stomach, when the vomiting occurs while the stomach is filled. Cases in which vomiting occurs with an empty stomach will prove obstinate, as they depend on some anomaly of the nervous centres; thus, for instance, in cerebral tumors, exudative processes, or in vomiting occurring in the first stage of many diseases attended with fever. It is almost always observed among the premonitory symptoms in scarlatina, and frequently in other eruptive fevers; and is so often met with in the commencement of pleurisy and pneumonia, that these diseases, before exudation took place, have sometimes been mistaken for an affection of either the digestive organs or the nervous system. I have known vomiting to usher in attacks of intermittent fever. Is it to be explained by the fact that the functions of the stomach are always interfered with in diseases attended with fever, both in infantile and adult ages? I believe not, for we certainly could not with such an assumption explain the other fact that no vomiting will occur in the second or third stages of pneumonia, or pleurisy, and in the prolonged course of normally developed eruptive fevers, although the appetite is no better, nor the faculties of the digestive organs in any respect improved. We must assume that the fever has the influence of producing the anti-peristaltic motion by its action on the nervous system, for we sometimes observe that vomiting will, ceteris paribus, occur more frequently in one epidemic than in another. That the nervous system, or rather the brain and the vagus nerve, have the influence of forcing the stomach into anti-peristaltic motions, is well known. Mental emotions in the child even, will give rise to vomiting. In cases of either uræmia or embolia in the course of eruptive fevers, especially scarlatina, one of the first symptoms will again be vomiting. Vomiting is further well known as a symptom of cerebral disease, where the stage of irritation has not passed into that of too copious exudation and entire depression. Its occurrence, therefore, as a common cerebral symptom, is of great importance, not only the presence but the stage of cerebral disease being thereby announced. There is one disease, particularly, in the premonitory stage of which the occurrence of vomiting has acquired the reputation of being a pathognomonic symptom. I mean acute meningeal tuberculosis, or, as it was formerly called, acute hydrocephalus. While acknowledging the importance of vomiting as a diagnostic symptom in this fearful disease, I have, I think, found from a certain number of cases, that it cannot be regarded as absolutely pathognomonic. A limited number of cases have, on post-mortem examination, revealed to me tubercular deposits on the arachnoid membrane, where the absence of vomiting would have excluded the diagnosis of tubercular meningitis. The difference found by me hitherto, and which I hope to verify by further experience, is this—that vomiting is a regular symptom in tubercular meningitis of the base of the brain, while it is the rarer the less the basis is affected. The immense majority of cases are those in which the fossa Sylvii and the base generally suffer most. But I remember two cases, in which there were tubercular deposits over the surface of the large hemispheres alone, with but moderate liquid exudation; in these no vomiting was observed. I further remember two cases in which the mass of tubercular deposits was on the same place, a few being found at the base. In these cases vomiting would occasionally take place. I hope, therefore, we shall be able yet to detect a diagnostic difference between the symptoms of tubercular deposits on distinct regions of the brain.

The majority of cases of vomiting, however, depend on some affection of the stomach; and yet severe affections of this organ are very rare in children. Usually the mucous membrane is in a hyperæmic condition, and the secretion altered in its character. Alimentary injuries, entozoa, refrigeration, and nervous disorders, have been alluded to as causes of, and some general morbid dispositions, like scrofula or rachitis, are known to be in intimate connexion with, gastric catarrh. The warm season is generally so productive of diseases of the gastric and intestinal mucous membrane, that the number of cases will generally be found to increase or decrease, according to the variations of temperature. Vomiting is a constant symptom in nurslings affected with catarrh of the stomach. But as I have stated above, it is characterized by the milk being brought up in an uncoagulated condition; coagulation will take place either on the influence of the normal gastric juice, or of free acid contained in superabundance in the secretion. Coagulation not taking place, and the usual admixture of mucous masses, show that the secretion is abnormal, and has no effect on the ingesta, and that much mucus is contained in the stomach. Soon after, or from the beginning of the first symptoms of gastric catarrh, the evacuations of the bowels commence to change. They consist of a greenish, or yellow-greenish, or yellowish liquid of acid reaction, and of white or yellow little lumps. The general appearance of the patients is not at first much altered; the countenance, however, is pale, the cheeks a little bloated, the eyes sunk. The expression of the face is quiet until colics make their appearance; the large fontanelle is not sunk; temperature of the skin, number and mode of respiratory movements, and sounds and impulse of the heart are quite normal, voice loud and clear, and the voluntary movements of the little one not interfered with. The mucous membrane of the mouth, and especially the tongue, look abnormal. The tongue of older children is generally furred and whitish, being covered with thick layers of mucus and epithelial scales. The condition of the tongue, however, is far from being a pathognomonic symptom. Catarrh of the mouth and tongue, and of the stomach, are usually found combined, but frequently without any connexion. Many mistakes, therefore, will be made, by drawing conclusions, from looking at the tongue alone, on the condition of the mucous membrane of the stomach; and nevertheless, you will often see the entire diagnostic skill of both professional and unprofessional doctors to consist in the scrupulous and religious regularity with which they act as official tongue-inspectors.

Very young infants show more regularly some affection of the mouth and tongue. It is injected, swelled, the epithelial layers partially thrown off, and the papillæ often elevated. In them there is always a direct connexion between the catarrhal affection of the mouth and stomach, but not in the manner supposed by the partisans of difficult dentition. In their opinion, the catarrh of the stomach is the consequence of the catarrh of the mouth induced by "dental irritation;" the truth is, that the catarrh of the mouth is effected by the raising of the acid secretion of the catarrhal mucous membrane of the stomach. Nor is anything in the medicinal treatment which can be taken to announce any direct connexion between gastric catarrh and difficult dentition. Neither calomel, nor rhubarb, nor bismuth, nor alkaline carbonates, nor nitrate of silver, nor muriatic acid, all of them much used in the acute gastric catarrh of infantile age, is known to ease the protrusion of teeth; they are administered for their direct effect on the mucous membrane of the stomach. And the diet, finally, advisable for infants not fed on breast-milk, as both curative and prophylactic, does certainly not show a dependency of gastric catarrh on anything but a direct and local injury. Some hints on the use of milk, on which infants ought to be fed almost exclusively, in regard to the affection alluded to, may be of some practical importance, and deemed worthy of your notice. I shall be brief in adding them. Always use cow's milk as fresh as you can. You cannot always expect milk, even in the ice-box, to keep from one morning to the next. Boil the milk, to postpone the transformation of the sugar into acid. Diminish the amount of sugar to be added to cow's-milk in acid secretion of the stomach. Where there is the least suspicion of acidity add a small quantity of bicarbonate of soda. Where there is the least suspicion of acid secretion in the stomach, add some vegetable slime (barley, oatmeal, arrow-root, according to circumstances), to prevent rapid and hard coagulation. The regular addition of chloride of sodium to every meal will also add to the digestibility of the food. Never use swill milk; never give milk undiluted; never consider milk as a beverage, but always as food; give water when infants are thirsty, and never give food while they are still well oftener than once in two hours, in the first month of life; never oftener than once in three hours, after the first or second month. Make the intervals longer in case of catarrh of the stomach, which diminishes the digestive power. Never regard the violent screaming of an infant affected with gastric catarrh as indicating hunger; they will sometimes appear to be voracious, mistaking the disagreeable feeling of the peripheric ends of their vagus nerve for the sensation of hunger. Keep the affected organs of digestion from over exertion, as you would a sore limb.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. V.

INDICATIONS FOR THEIR USE (*continued*).

Of the *diseases of the skin* a majority have certainly a deeper constitutional seat than we habitually recognise; even parasites not being apt to thrive on perfectly healthy individuals. A considerable proportion of these maladies may be traced to faulty performance of the digestive functions, or to some error of se- or excretion, whereby either imperfectly elaborated new material is added to the blood, or effete and noxious is not removed. Thus due investigation may reveal that, previous to the appearance of the cutaneous disorder, there were marked dyspeptic symptoms, some trouble about the action of the bowels or kidneys—perhaps piles. With the occurrence of eruption on the skin, these symptoms fall into the background, and are often so long forgotten as to be ignored by the patient. Cutaneous affections are also, not only as a rule, connected with certain congenital constitutions which eminently predispose to them, as the scrofulous, but are occasionally associated and alternate with other forms of positive disease. Thus M. Noël Gueneau de Mussy[*] has recorded a case where a lichenoid eruption of the hand and forearm alternated with a most obstinate subacute rheumatism. Chomel has remarked the connexion of some neuralgias with the "dartrous," "herpetic," or skin disease diathesis.

In the fall of 1853, I saw an unmarried woman, forty years of age, inheriting a marked scrofulous constitution, who had for twenty years suffered from an unusually severe eczema-impetiginodes of the hands, arms, and back of the neck. In the spring the eruption disappeared spontaneously, and a most aggravated æstival catarrh or bronchitis took its place, in its turn to get well in the fall, when the eruption re-appeared. Menstruation had always been scanty and irregular. Treatment on general principles, especially the free and persistent use of iodine, iron, quinine, and aloes, commenced in autumn, restored this woman to vigorous health. Her father, from whom she inherited her scrofulous constitution, constipated and dyspeptic all his life, in his sixty-second year, became afflicted with an impetiginous eruption, similar to the daughter's, on the right instep, when, as he said, his general health became for a time better than it had ever been before, and his dyspepsia disappeared. The eruption spread, and degenerated into an extensive ulcer; all efforts to cure this failed, and after years of suffering—for it became exceedingly painful—the patient died exhausted. In this case the hemorrhoidal had been grafted on the congenital scrofulous constitution, and the result had been a compound diathesis, seeking relief in the safety-valve of impetiginous discharge. An interesting and exceedingly suggestive phenomenon occurring in the course of his treatment deserves record here. Under the use of arsenical preparations, the sore seemed twice on the point of healing, when the occurrence of the symptoms of severe gastric and general disorder caused the cessation of the remedy; the sore rapidly enlarged again, and the general health was comparatively restored. The patient, his friends, and his physician, attributed these symptoms to arsenical poisoning, but a reduction in the size of the sore, to the same extent, by external treatment alone, was always followed by the same train of symptoms, and hence the necessary abandonment of further effort. Every rational mode of revulsion was attempted, such as issue, which seemed of no service, and purgatives, which always proved dangerous, the tendency to metastasis being so great that obstinate diarrhœa was apt to follow the action of the mildest, with stoppage of discharge from the foot. I am now satisfied that I could have prescribed for him the strong chalybeate common salt waters, indicated by the diathesis, in such way that the maximum tonic and alterative effects might have been secured with only necessary, not excessive, revulsion. Being an old man, he might have had to continue the use of the remedy more or less for the rest of his days, but he would, I firmly believe, have thereby cheaply bought immunity from suffering, and comparative enjoyment of life. The daughter might have been cured by the same means.

I may here not inappropriately quote an important observation of Schönlein, that "when cutaneous disorders co-existing with a scrofulous diathesis are cured by the use of sulphur waters, the diathesis, not being favorably modified by the remedy, is sure to show itself subsequently in some other form." It would seem to follow that in such cases sulphurous waters merely repress the eruption, do not cure the diseased condition of which that is perhaps only an anomalous manifestation, or they may simply increase the previously insufficient functional activity of the skin up to a normal standard, just as we see every day eczema impetiginodes obstinate and troublesome during the winter months, disappear spontaneously with the advent of warm weather, certain to return in the fall, unless the diathesis be in the meantime modified by appropriate treatment.

The retrocession of chronic cutaneous affections is intimately connected with the production of several other diseases besides those of which I have given examples, such as dementia, headache, cough, leucorrhœa, chronic metritis, etc. Thus I have seen winter impetigo alternate with summer catarrh, or "hay fever," both giving place to a profuse discharge, sometimes from the right, sometimes from the left frontal sinus, which, though previously refractory under the best treatment both in this country and abroad, has been entirely cured this summer by a judicious use of mineral waters alone.

I once treated a lady attacked with acute mania, consequent on the sudden drying up of an impetiginous eruption on the back of the neck with which she had been troubled twenty-two years; the mania persisted upwards of twelve months, when the eruption re-appeared with a coincident restoration of mental soundness. The danger of such migrations of diseased action in the acute exanthemata is well known, and it ought to be remembered that in chronic cutaneous affections the law is the same, if the consequences are not always so immediate or so grave. As an additional illustration, I may mention that I attended a lady in whom, for the third time, urticaria suddenly ceasing, a most alarming congestion of the bronchial mucous membrane took its place.

The reader will by this time have divined that in writing on the employment of mineral waters in cutaneous disorders, I should insist on the primary importance of studying the diathesis of the patient and the constitutional relations of the malady. This is the only key to a rational treatment. I have mentioned the French notion of a herpetic or dartrous diathesis. They claim that in certain individuals there is a marked tendency to cutaneous affections, and that no other vice of constitution or diathesic tendency can be discovered; that this constitution is hereditary, and even when there is no positive eruption on the skin, may be seen in the metastatic disorders, of which I have already given several examples. The hereditary character of the scaly varieties is the strongest point in favor of this view; but certainly, to my mind, the great majority of skin diseases occur in the scrofulous diathesis, or in that hereafter to be treated of, which I shall call the hemorrhoidal, and I am loath to allow of the existence of a special diathesis where the evidence of general constitutional morbid tendencies is not more marked than in a simple cutaneous eruption. On the other hand, the notoriously increased irritability and diminished tone so characteristic of erethric scrofula, would seem to invite metastatic migrations of disease, as well as expose the delicate skin to its primary attacks; just as the thick coarse skin and general sluggishness of the whole system in the torpid form equally invite and explain cutaneous affections, and allied internal congestions. I cannot devote more space to the discussion of this subject, but shall content myself with ignoring the "dartrous" diathesis, and only hold to the gouty and rheumatic, the syphilitic and scrofulous, and the hemorrhoidal. Nothing, therefore, need be added to what has been or will be advanced, touching the hydro-mineral treatment of the diathesic conditions underlying skin diseases. The internal administration of the waters is only expected to act on the general system, and so to reach its most distant parts; the external, on the other hand, displays a powerfully modifying influence on the diseased organ, and through it may exert no little on the system at large. The former is calculated only to remove primary derangements, leaving the secondary manifestations of disorder on the skin to get well of themselves, or rendering them susceptible of cure by internal or external medication, or both, though previously refractory to all such treatment. Thus the chalybeate common salt waters, particularly suited to the removal of the scrofulous diathesis, are no less efficacious in the restoration of deranged menstrual or digestive function, often the real cause of the cutaneous disease; while the glauber-salt class are equally adapted to the removal of hepatic complications. A persistent use of small doses of sulphate of soda alone has been observed to cure not only impetigo, but a very obstinate case of ecthyma faciei, which had resisted arsenic and Donovan's solution. A suspicion of hepatic congestion provocative of the skin affection, led to the employment of the sulphate by the relator, Dr. Sutro, and the result justified his diagnosis.

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[*] Traité de l'angine glanduleuse.

Acne punctata, the annoyance of young people of both sexes, is best cured by means of the stronger common-salt waters, with occasionally, on the occurrence of a fresh eruption, the epsom-salt for a week or less. By the same treatment I cured a most aggravated case of *acne rosacea* of six years' standing, in the person of a young man, which had resisted able treatment, and annual courses, internal and external, at Sharon and other springs. The first appearance of the eruption on the nose, was preceded by symptoms of irritative dyspepsia, and each fresh outbreak, commonly at intervals of three or four weeks, by those of hepatic congestion. Hereditary predisposition was very marked in this case, the mother having for more than twenty years rarely been free from aggravated dyspepsia or chronic catarrhal affections of the respiratory mucous membrane. By a judicious employment first of the mild glauber-salt waters and then of the strong chalybeate common-salt, she has been restored to a state of comparatively vigorous health; capable of supporting fatigues and exposures previously impossible or dangerous.

As in no forms of chronic curable disorders have mineral waters been used externally more extensively than in the cutaneous, much would remain to be said were I treating of any other branch of the subject than their internal administration. At many thermal stations external treatment alone is employed with great success; it may be proper, therefore, to observe that the springs at several of these are so feebly mineralized, that baths of common water employed with the same medical skill and discretion, and under the same hygienic influences, would probably prove equally efficacious; while as they become more highly charged with salts, they are the more often employed internally as well as externally, and the general rules applicable to their use in the former mode are equally so in the latter. In the use of baths acting directly on the extended surface affected with disease, the important point is to steer a middle course, now soothing the irritation excited or existing, now stimulating, again restraining the too violent action set up. It is especially the scaly diseases for which bathing in mineral waters is deemed most imperative, yet I have seen all its good effects produced by simple water dressings; and when one recollects how easy it would be to apply a mineral water in the same way, it is singular that no series of experiments has been made thus to determine the value of the mineralization of the water *per se*. So great an amelioration is often obtained in psoriasis by external thermal treatment alone, that both patient and physician confidently expect a cure; whereas the primary disorder neither having been detected, treated, nor perhaps even suspected, or the diathesis not having been favorably modified by a simultaneous use of appropriate remedies, whether mineral waters or pharmaceutic preparations, the disease is sure to return.

In the skin diseases characterized by discharge, as eczema, impetigo, &c., the use of mineral water baths alone is occasionally followed by crises, which, while they are heralds of approaching cure, at the same time reveal the primary derangement. The most common are clammy sweats, diarrhœa, piles, or increased menstrual discharge. In the production of the three last named critical evacuations, the internal use of appropriate waters alone would have proved equally efficacious, though the bath would be a valuable time-saving adjuvant; in the first case it is of primary importance. In another series of cases, when there is a sufficiency of constitutional vigor and only local vice, the exclusively external thermal treatment, like the use of caustics in chronic conjunctivitis, converts the chronic into a moderately acute form of inflammation, rapidly subsiding after a duly limited application of the exciting cause, and followed by a certain amount of resolution; the process repeated at proper intervals completes the cure. Sometimes we see a result from which the surgeon may perhaps take a hint: during a regular course of baths the disease disappears, then speedily reappears, perhaps, worse than ever; the patient returns home disgusted at his apparent want of success, when he is spontaneously relieved; the impetus is given, and though he may have one or two more attacks, each will be milder, till they cease altogether. The continued action of the baths in such cases, like the too frequent application of caustic already alluded to, would have counteracted the very effect intended to be produced. Indeed the same rule applies to the internal employment of the waters in all those cases where the quantity administered is so large as to produce marked disturbance. A recurrence to the use of the same waters which have effected the cure, within a period of not more than a year, should be considered an imperative duty, and in some cases must be repeated, in order to insure freedom from relapse.

With a case illustrative of the powers of the combined internal and external use of the waters of Nauheim, chalybeate common salt, I conclude this paper. Armand Rotureau (loc. cit.) says, * * * "I cannot resist the desire to report the remarkable results which a treatment of one month only produced in the case of a young girl of fifteen, Otille Herzog (of Cassel), whose whole body, more particularly the limbs, was covered with blackish tesselated scales, very rough to the touch, and surrounded by a whitish discoloration. The skin had the aspect of shagreen, and friction detached furfuraceous scabs, contrasting with the above mentioned black ones. Before my eyes, so to speak, and from day to day, the skin recovered its suppleness and normal color, and the young girl returned home entirely cured.

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COMPOUND GUN-SHOT WOUND IN THE FACE.

By Dr. MOURLON,

ASSISTANT SURGEON TO THE ARTILLERY OF THE GARDE.

Translated by Dr. Deslandes.

The angle of incidence of the projectile, its form, the distance of the enemies, the tension or relaxation of the wounded tissues, and their density, explain the singularity and variety of the numerous kinds of wounds which we may meet with on the battle-field. A wound apparently of little importance, may be followed by frightful disorders and rapidly end in death, or leave after it extensive scars, deformities, or lesions impeding the exercise of important functions. Another, which, at first sight, seemed fatal, heals very rapidly, with hardly any visible marks, often without subsequent disorders of the great apparatus. The journals of military surgeons teem with numerous such examples.

The case I publish is remarkable for its apparent gravity and its happy termination; but this is not what gives it most interest in my eyes. It is particularly interesting in regard to the consequences of the wounds of the lacrymal apparatus, the palate, and the pharynx, and lastly, on account of the obscurity which envelopes the issue of the projectile.

D——, 25 years old, a private in the artillery of the garde, of a lymphatico-sanguine temperament, usually enjoying good health, received, on the 24th of June, at noon, on the battle-field of Solferino, a gun-shot wound in the right orbitar region. After dividing the skin of the upper eyelid through all its length, the ball entered the great angle of the eye, broke the os unguis, and perforated the palatine arch; breaking the palatine bones, it made a wound oblique from within outwards, from behind forwards, from the right to the left, beginning at the raphé, and finally fell in the mouth, contusing and abrading slightly the tongue and pharynx. Having suddenly lost his consciousness, he knew not what had become of the projectile. He had immediately the attendance of a surgeon, who dressed the wound in the eye, sought vainly for the ball, and sent the patient to Castiglione.

After a day spent without attendance in that village, he was taken to Brescia, where he only remained four days. There, two small pieces of bone which projected from the palatine wound and embarrassed the deglutition, were extracted. The edges of the solution of continuity were brought together, and the patient was charged not to speak, nor to make any movement of suction. D—— remained afterwards five weeks at the St. Luke's Hospital, Milan. The palatine wound and the abrasion of the tongue were watched. An acute inflammation of the right eye and its appendages had set in on the way; it was treated by ice, and then emollients. For fifteen days D—— lived only on broth; the tongue and pharynx being no longer painful, and the palatine wound doing well, he was allowed a semi-fluid food. After fifteen days more of that treatment the palatine fistula was cured, and he resumed his usual way of living. For a month he had not seen from the right eye; little by little the sight returned, and on the 10th of August, he saw well enough to find his way unassisted. Removed successively to Genoa and Marseilles, and then to Paris, D—— entered the Hôpital du Grascaillon, August the 21st, 1859, for œdema of the eyelids, acute conjunctivitis and epiphora of the wounded side. After forty days of treatment (leeches, emollient and astringent collyria) he was enabled to leave. On the 21st of June, 1860, he re-entered the hospital for the same difficulty—the same means cured him in a month.

On the 3d of September I sent him to the Grascaillon for a phlegmon in the neck. He remained there a month, and came back with two fistulæ of the left sub-hyoidean region, following phlegmonous abscesses. I treated him in the infirmary by cataplasms, to discuss the chronic swelling which envelops the trachea, and descends along the left sterno-cleido-mastoid muscle, as far as the clavicle, and made a counter opening at the incisura semilunaris of the sternum, to give issue to a new collection of pus. There was still some around the trachea, and the clavicular insertion of the sterno-mastoid. The fistulæ furnished a scanty but inexhaustible amount of pus. Iodine injections failed to arrest it; the skin remained loose, without any tendency to unite with the subjacent tissues. Could not the ball have been lodged in that region?

As D—— was failing, I sent him to breathe the fresh air at Neuilly, limiting the treatment to attention to cleanliness, etc. On the 5th of January, 1861, there was a slight epiphora or linear scar, hardly visible, on the right upper eyelid, arising from the reflected tendon of the superior oblique, and ending at the great angle of the eye; caruncula lacrymosis destroyed; angle of the eye deeper than in the normal state; very marked projection of the tendon of the orbicularis palpebrarum, still a little amblyopia of the right eye. Intermittent sub-orbitar neuralgia; obliteration of the right nasal duct; linear scar very solid on the palatine arch; fistulous openings below the left clavicle, three in number, two or three fingers' breadth above the clavicle, and two fingers' breadth from the trachea, one immediately above the sterno-clavicular articulation. On the 15th of January I incised the bridge which separated the two upper fistulæ. A purulent furrow having detached the skin above the lower fistulæ, I cut on the grooved director as far as the furculæ of the sternum. In this way there remained only two openings communicating with a focus situated under the left sterno-mastoid. On the 20th, my upper incision was replaced by a scar; the lower one was doing well. On the 25th I made with the bistoury the two openings into one; and on the 30th there was only one fistula, through which the abscess situated under the sterno-mastoid was reached.

The weakness of the ball near the end of its course, and its angle of incidence, explains the mildness of the disorders. The ball was fired from afar. It made on the eyelid a groove-like wound, only grazing it; tracing a furrow on its surface, without penetrating it. It produced something like what was formerly attributed to the wind of projectiles; hardly did the ball break the skin;—however, it produced a grave concussion of the eye, which, for more than a month presented symptoms of amaurosis. The tension of the eyelid was in itself insignificant. Lesions of the eyelids may be serious, on account of the neighborhood of the eye, of the loose and abundant cellular tissue of the upper eyelid, and of the orbit, or on account of the numerous nerves of that region. In 1829, Blandin treated a gun-shot wound of the right temple, with fracture of the malar bone, and of the internal wall of the nasal fossæ; his patient lost his sight on that side from concussion and extravasation of blood. M. Jobert (de Lamballe) has observed a detachment of the iris from concussion. It was necessary to extract the crystalline lens, which had entered the anterior chamber. The wound of the eyelid healed very rapidly, leaving a scar hardly visible. There was neither phlegmon nor sphacelus. We know how difficult it is, notwithstanding the numerous autoplastic processes, to restore an eyelid lacerated by a gunshot. Slight and intermittent pains on the track of the suborbitar nerve were the only consequence of the disease. Lower down the ball destroyed the carunculo-lacrymalis, the lacrymal sac, without any great inconvenience resulting. The epiphora, at first considerable, was finally almost nothing, and increased only in the sharp air. The secretion of the lacrymal gland was greatly decreased in quantity. The fracture of the os unguis, and probably of the ascending ramus of the superior maxillary, was long in uniting. An exfoliation of bone produced twice inflammatory symptoms in the appendages of the eye, which required treatment in the hospital.

The wound of the palatine arch, à priori, was alarming. We know what inconvenience to deglutition and phonation results from fistulæ in that region. We know, also, the difficulty of filling them up, notwithstanding the ingenious methods of Roux, Krimar, and Velpeau. The operations attempted to obliterate them seldom succeed, and we are obliged to have recourse to an obturator. The splinters were extracted, the edges of the fistula brought together, and union took place admirably. There was no longer anything to be seen but a white and straight scar, like that resulting from a simple incision. The abrasion of the tongue presented nothing peculiar. It healed easily, and of itself; rest of the organ, silence, and diet sufficed. It was the same with the pharynx.

But what had become of the projectile? I have some doubts as regards its final course. Having reached the pharynx, was it swallowed unknown to the patient, who was under the influence of the concussion? or again, had it gone to lodge itself in some anfractuosity beyond our means of exploration? I incline to the latter opinion, supported by the consequent phlegmonous symptoms in the neck, and the inexhaustible suppuration which took place through the fistulæ spoken of. The ball in this hypothesis would have gone round the larynx, and stopped behind the left sterno-mastoid, where it probably is still. For the last fortnight my doubts have been clearing, and I think I am on the right track.

Now a fortnight ago, there existed three fistulæ, all giving issue to pus. The two upper were separated by a bridge of very thin skin. A stroke of the bistoury united them, and convinced me that the subjacent tissues were not altered, and that there was no foreign body. The lower one led to two different abscesses—a vertical one stopping at the sterno-clavicular articulation, the other seated under the sterno-mastoid, oblique from above downwards and forwards, within outwards, three or four centimeters in length (two to two and two-fifth inches). At this depth the stylet was arrested by a resisting obstacle, little painful, but which gave no metallic sound on percussion; the toucher ascertained the presence of a small tumor and some empâtement. By incising on the grooved director, the vertical track, I ascertained that it was the result of the detachment of the skin by suppuration. The cause of the continual formation of pus resides in the oblique fistulous breach.

When I sent D—— to the hospital, September 3d, 1860, it might have been supposed that he was suffering from cervical adenitis connected with a scrofulous or syphilitic diathesis, judging from the considerable swelling of all the left side of the neck, so little connexion there seemed to be between the invasion of these symptoms and a wound received fifteen months before, and cured a year ago. But the march of the disease was not that of adenitis. There was fever, and the swelling here terminated in an abscess on a level with the larynx. D—— never had any venereal or scrofulous disease, and there were no swollen ganglions either under the jaw or on the clavicle; and, precious information, he has often felt a slight pain on the left of the larynx since the day when he received his wound. An abscess must have formed a year ago, in the neighborhood of the os hyoides, and opened at the base of the tongue. The tissues swelled, little by little, beginning at the seat of the primitive painfulness.

From all that, I conclude that the abscesses of the neck are caused by the presence of a foreign body, and I ask myself if that body could now be the ball which D—— received in Italy.

What is to be done then? to go in search of the projectile, or wait till the suppuration carries it out? I have adopted the latter plan of conduct. Already, there is but one fistula through which is reserved an easy issue for the pus, and the progress of the foreign body can be watched. I could not think now of extracting it on account of the numerous and delicate organs which are situated in this region, and particularly because of the uncertainty of the present situation of the *corpus delicti*. One circumstance only would decide me on acting immediately, and that is if the pus had a tendency to migrate towards the chest. Fortunately such is not the case, and I hope that the season I spent at Barèges, or at Bourbonne, will save the patient from any future danger.

To sum up, here is the history of a soldier, who, after having been perfectly cured of a division of the eyelid, and of a palatine fistula resulting from a gun-shot wound, presents us with a very rare example of a ball sojourning in the thickness of the neck for fifteen months, before producing the least inflammatory symptoms. To terminate, and to insist once more on the final result of the lesions observed in D—— I would remark that this young man's features are almost as regular as before receiving his wound. This consideration bore for me great value; and as to my wounded soldiers, I attach a great importance in the preserving the integrity of the forms in all the regions, and specially in cases of wounds of the face.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. CHURCH.

(Reported by Henry M. Lyman, M.D., House Surgeon.)

Jaundice—Ophthalmia—Meningitis—Death—Autopsy.

Catharine C., æt. twenty-one, a single person, of intemperate habits, had long been in ill heath. She was admitted to the hospital, May 25th, 1861, at which time she was much jaundiced. The liver appeared to be enlarged, and the patient was continually inclined to sleep. Complaining of pain in the region of the liver, several leeches were applied over that organ, and calomel with sodæ bicarb. was administered internally, occasioning great amelioration of the symptoms of the disease. At daylight in the morning of June 5th, the patient discovered that her sight was gone. Her eyes had been perfectly healthy the day before, and at two o'clock in the morning, June 5th, having had occasion to use a candle, she had experienced no difficulty of vision. But now the conjunctivæ were becoming rapidly congested.

June 6.—The congestion having proceeded to chemosis, the conjunctivæ were freely scarified, leeches were applied to the temples, and the bowels were purged with salts and senna. Opiate lotions were applied to the eyes, or rather to their lids, which, June 7th, were so greatly swelled that it became necessary to puncture them freely before their tarsal margins could be separated. In spite of all treatment, the inflammation of the eyes continued unchecked, and involving all their tissues, resulted in their complete destruction before five days had fully elapsed. *June* 8.—The patient was delirious, deaf, continually moaning with pain, and vomiting frequently. The skin was natural, the tongue was slightly furred, the pulse was accelerated but not full. The bowels were copiously evacuated with saline cathartics, and the patient remained without much change till the evening of June 10th, when she began to sink. The pulse became more and more rapid and feeble. Whiskey, beef-tea, carbonate of ammonia and quinine were administered, but without effect. Delirium merged itself in coma before midnight, and death occurred soon after two o'clock in the morning, June 11th.

The autopsy was made thirty hours after death, at which time the rigor mortis was slight. *Cranium.*—The membranes covering the brain were greatly congested, and the larger vessels were turgid with blood. At four or five different points upon the convexity of the brain, and in the fissure of Sylvius upon the left side, were small patches of leek-green pus beneath the arachnoid, and lines of lymph were observed near many of the large vessels. At the base of the brain were three or four ounces of turbid serum filled with flakes of lymph. A layer of green pus intervened between the pons varolii and the basilar process. The lateral ventricles contained a small quantity of turbid serum; the posterior cornu of the left lateral ventricle was nearly filled with pus. The walls of the ventricles were congested and softened. The choroid plexuses were pale, and their meshes were filled with clotted masses that had the appearance of coagulated lymph.

Thorax.—The lungs were at several points attached by old adhesions to the costal pleuræ; in other respects they were healthy. There was fatty degeneration (Quain's) of the heart; its weight was ten ounces. The aortic and mitral valves were atheromatous, and there were numerous vegetations upon the mitral valve. The valves of the right side were healthy. *Abdomen.*—The stomach, intestines, spleen, and pancreas appeared to be healthy. The liver was fatty, but it weighed only three pounds and eight ounces. A large calculus was found in the neck of the gall-bladder. The kidneys each weighed five ounces and a half; they were congested, and their surfaces were mottled with white, as if by a deposit of fat in the cortical portion of the organ.

American Medical Times.

SATURDAY, SEPTEMBER 7, 1861.

ANÆSTHETICS IN MILITARY SURGERY.

We have hitherto devoted much space to the consideration of those questions relating to the health of our troops, the positions, duties, and relations of the medical staff of the regular and volunteer forces, and such other incidental subjects as the events through which we are passing have suggested. There are, however, some questions of a purely scientific character, which still remain debatable among army surgeons, to the settlement of which we deem it our duty to contribute such facts and suggestions as we may possess. We do not, however, wish to be understood as presuming to dictate any rules of guidance to the military surgeons, but merely to furnish such materials, gathered from various sources, as will enable them to act in the light of experience.

The first question which we shall present for discussion is, *the use of anæsthetics in the practice of military surgery.*

We may state, *in limine*, that the question of the employment of anæsthetics in the civil practice of surgery stands thus:—1st, These agents are universally employed, except perhaps where the patient is semi-narcotized by alcoholic liquors; 2d, Ether is used by many in preference to chloroform, through fear of the dangerous effects of the latter, and the supposed innocuousness of the former, while in some of our large civil hospitals the employment of chloroform is strictly forbidden by the medical boards. Still it cannot be stated as a fact that there is a great preponderance of surgical opinion in favor of either agent. But the practice of military surgery lays claim to peculiarities sufficiently distinctive to entitle it to discuss from its own stand-point many established principles in civil surgery, and accept or reject them according to the weight of evidence drawn from the field of its own observations. In the consideration of the question proposed, we shall not, therefore, refer to the opinions of civil practitioners, but shall present, as far as our limited space will allow, the views of military surgeons.

The Crimean, Italian, and Indian wars, have furnished the first opportunities for testing the value of anæsthetics in military surgery. Of these, the Crimean war has supplied the most reliable data, and it is from this source that we shall chiefly, though not entirely, draw our information. This question resolves itself into the following propositions:—

1. The propriety of employing anæsthetics at all.
2. If employed, which shall be preferred, ether or chloroform.

The objections which are raised to the employment of anæsthetics may be stated as follows:—1. The excitement of the soldier is often sufficient to carry him safely through the severest operation (Guthrie); 2. The shock after gunshot wounds produces such depression that anæsthetics would prove injurious by adding to the depression (Velpeau); 3. Pain is a necessary stimulant in shock (Cole); 4. Anæsthetics retard union by first intention, and predispose to hemorrhages and pyæmia (Porter, U. S. A.). These serious, and to a certain extent valid objections, are not considered by military surgeons generally as of sufficient importance to prohibit their use; while those having the largest experience, as the surgeons of the British and French army in the Crimea, disregard them altogether. It may be safely stated, therefore, that the employment of anæsthetics in military surgery is recommended by the most reliable authorities.

The second proposition resolves itself into this:—Chloroform having certain obvious advantages over ether, as in the small quantity required, its more agreeable odor, and the rapidity of its effects, why should it not always be preferred? In the discussions upon the use of anæsthetics, writers generally refer to chloroform as the type of these agents, and their approval or objection is based upon its effects. Ether is rarely alluded to in terms. Let us then examine the claims of chloroform, in the light of experience, upon the attention of the military surgeon.

First, we will quote from writers who object to its use:—"The practical surgeon views it in the hands of the *military* medical officer as a highly pernicious agent, which unquestionably *it is* * * in time of war, on the field of battle, on the bloody plain, or in the field hospital, it should *not* be found. No place should be assigned to it. * * We could with ease adduce fourscore cases to prove that chloroform is injurious in field-practice" (Cole). Mr. Cole gives a single case where he thought chloroform produced fatal effects, but it is too trivial to quote; his objections are otherwise unsustained by facts.

An English surgeon in the Crimean war writes:—"At the commencement of the war, most of us, I believe, started with the doctrine that, in those cases where, from the exhausted state of the patient, chloroform was inadmissible, an operation of any magnitude should not be performed. * * Throughout the war, chloroform has, I believe, been administered universally. I have never performed, except on fingers, nor have I ever witnessed an operation, without its assistance. At the same time I must in candor confess I do not altogether like it, and that there are cases in which the value of its assistance may be questioned. In cases of thigh injuries, it often happened that amputation was out of the question, in consequence of the patient never rallying at all; and in many instances it was, I have no doubt, performed in cases unfavorable to its success, in consequence of a feeling that the longer the delay the less was the chance of its being borne at all, whilst the only alternative was a certain death. In such cases I should dread the effects of chloroform; I am not prepared to say that the advantage derived from the absence of pain is counterbalanced by the exhausting effects of the drug; but I do say that I have seen more than one instance where the patient has lain on the table, after an operation performed, too, under the most favorable auspices, so reduced by the effects of chloroform as to cause considerable anxiety to the operator." Speaking of those cases of which we often hear, "that the operation was skilfully performed, very little blood lost, but the patient never rallied, and died in a few hours," he says: "My own impression, from what I have seen of the effect of the drug, is, that many of these cases died from the exhaustion induced by the shock of the injury, and the consequent operation; but that this exhaustion was assisted and kept up in a most material degree by the depressing influence of chloroform."

Such is the general tenor of the objections which we have met to the use of chloroform. On the contrary, the English, in the Crimean war, generally speak in the most decided terms in its favor, as the following quotations will show. A surgeon standing high in the Medical Department of the British army writes: "All my experience of chloroform, which has been pretty extensive, is in its favor, and I am the more disposed to express my opinion strongly on this subject, as I am aware it has been the fashion, with some medical officers of the army, to discountenance and proscribe its use altogether, a practice, I conceive, as inhuman as it is irrational and prejudicial." In regard to the danger of administering it in severe injuries, he says: "I was accustomed to rouse the patient from the state of shock by the exhibition of stimulants, composing his mind, before resorting to the use of chloroform; but I have since learned that the best stimulant and composer in such instances is chloroform." Another surgeon of equal distinction writes: "Chloroform was used in every case of importance requiring operation, with perfect success, and safety. The experience of the medical officers of this regiment goes to prove that it is as successful and its administration as safe in military as in civil surgery. Its reputation as an anæsthetic is too well established to require additional testimony."

Dr. McLeod, an intelligent writer on the Crimean war, says: "For my own part, I never had reason, for one moment, to doubt the unfailing good and universal applicability of chloroform in gun-shot injuries, *if properly administered*. I most conscientiously believe that its use in our army directly saved many lives—that many operations necessary for this end were performed by its assistance, which could not otherwise have been attempted—that these operations were more successful, because more carefully executed—that life was often saved even by avoidance of pain—the *morale* of the wounded better sustained, and the courage and comfort of the surgeon increased." He concludes: "It is, therefore, my clear conviction, that the experience of the late war, as regards chloroform, is unequivocally favorable; that it has shown that chloroform, both directly and indirectly, saves life; that it abates a vast amount of suffering; that its use is as plainly indicated in gun-shot as in other wounds; and that, if administered with equal care, it matters not whether the operation about to be performed be necessitated by a gun-shot wound, or by any of the accidents which occur in civil practice."

The French surgeons report the most favorable results from the use of chloroform. Baudens, Scrive, and others, confirm the apparently exaggerated statement that it was given 30,000 times without an accident. Baudens says:—"Chloroform conferred on the wounded in the Crimea a calmness and tranquillity of mind very favorable to a cure; it took from the traumatic fever that nervousness and that reaction which otherwise follows mental or constitutional disturbances."

But we have not space to extend these quotations. We have, we trust, opened the subject to the consideration of those surgeons now placed in a favorable position for its proper study and final solution. We cannot better close this paper than by quoting the conclusions of the Director-General of the Medical Department of the British Army, drawn from the opinions communicated by the surgeons of the Crimean army:—

1. That the majority believe the use of this anæsthetic desirable in all cases, both of slight and severe wounds requiring operations, where no organic disease exists (a circumstance little likely to be the case in a soldier on active service), due precautions being taken in its administration.
2. That a few partially concur in this view; but object to its use in minor operations, on the ground of its occasionally producing bad results, even when of good quality, and properly administered.
3. That a large minority object to its use in cases of very severe shock, more especially when much blood has been lost; on the ground that these cases frequently do not "rally," and this they in a great measure attribute to the depressing effect of the drug, after the anæsthesia has gone off; and this, even independent of the depressing effects of vomiting, which is not an uncommon sequence of the administration of chloroform in such cases.
4. That a smaller minority believe its use to be dangerous in secondary operations, when the patient's system has been very much reduced by large purulent discharges, and more especially when this reduction has taken place with rapidity greater than usual, from inordinate amount of discharge, or from the addition of secondary hemorrhage.
5. That the first effect of the drug is probably stimulant is not denied—but this is believed to be speedily followed by depression, and this depression is thought to take place usually, or almost always, even before the anæsthetic effect passes off—and it is thought the vomiting (or attempts at vomiting) not unusually following its exhibition, is an evidence of this, and, perhaps, materially aids in producing the danger.

THE WEEK.

In an address on the legal responsibilities of medical men, before the Illinois State Medical Society, Dr. David Prince, the late President, suggests the following changes in jury trials:—

"1. In any case the correct verdict upon which involves a greater familiarity with the art or science in question than is common to men of ordinary general education, to require, as a qualification of a member of the jury, that he have had a special training or education in the particular art or science. This would diminish the necessity for testimony by experts, which it is often difficult to procure in person, while it is necessarily imperfect when obtained by deposition. With such a jury the case would be far less likely to turn upon the mere shrewdness or power of ridicule of the lawyer.

"2. Another method would be, to so constitute our higher courts, or a branch of them, that the parties may appeal from the lower courts, in order that questions of right or wrong practice in any particular art or science may be passed upon by a jury or board of experts, free from the prejudices incident to the immediate neighborhood of the transaction.

"This latter investigation may be based upon the recorded testimony with regard to facts taken in the lower court, and need not necessarily involve ruinous expense."

We are satisfied that all attempts to modify our laws so as to avoid common jury trials in cases of alleged medical malpractice will prove unsuccessful. The high, sacred, and too often pleasing duty of assessing damages in these cases will never be yielded by the sovereign people. There is, however, one modification of the laws relating to trials which might possibly be obtained, especially if made to have a wide application, and which would answer the same end. It is this; in all cases at law involving questions of right or wrong practice in any particular art or science, let either party have the right of asking the appointment by the Court of three skilled persons, who shall first examine the case and determine whether the charge of malpractice is true or not; if it is decided to be true, let the case go before the jury for the assessment of damages; if not true, let it be nonsuited. Such a law would give the profession all the advantage desired, and still leave to the jury its coveted privilege of mulcting the luckless defendant. In the failure to obtain any such changes in the laws as would be especially beneficial to physicians, there is one modification of such general importance as to be readily conceded by legislatures, and which is a great improvement upon our State laws in trials for alleged malpractice. This change gives to both parties to the suit the right to testify in their own cases. In trials under this law an intelligent physician is pitted against an ignorant patient in giving the history of the case, and the treatment pursued, and the effect upon the Court and jury almost invariably proves disastrous to the cause of the prosecution. Since this law went into operation in the State of New York, we are not aware of a single case in which the medical man has been mulcted in damages, while many causes have been nonsuited by the Court immediately after the testimony of the attending physician, the defendant, has been taken. We earnestly recommend to physicians residing in States where this law does not exist to secure its enactment.

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In the following extract from a recent report on the Hospitals in and around Washington, by Drs. Van Buren and Agnew, of the Sanitary Commission, we have gratifying evidence that the generous contributions of benevolent associations have proved of great value to the sick and wounded soldiers:—

"But the principal want experienced by the sick, and one which the government makes no provision whatever for meeting, was found by your committee to be clean and appropriate hospital clothing. But for the liberal forethought of the benevolent women of the nation, our soldiers would have been compelled to lie sick and wounded in the clothes in which they entered the hospital wards, and which, in many cases, had not been changed or even washed for weeks before. Many had been already supplied, and your committee had the satisfaction of seeing, within a very few days after their first visit to the hospitals, that every sick man in hospital was fully provided with a proper suit of clothing, by the authority of the Commission. No available provisions being made by government for the washing of the clothing worn by volunteers on their entering hospital, the Committee secured the authority of the Commission for the employment of laundresses for this purpose; so that when the soldier is ready to leave hospital and resume his duties, his clothing will be clean and fit for use."

These facts should stimulate the benevolent to constant effort in behalf of the sick troops. There is a limit to the supplies furnished by Government, and it is just at this point that the community can, through the Sanitary Commission, supply needful and most important aid.

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The Annual Report of the New York Mercantile Library Association contains the following allusions to the late Dr. Francis:—

"It is with sincere sadness that we depore the loss of one of our honorary members, Dr. John W. Francis. The echoes of those eloquent eulogiums pronounced on one who so well merited the praise of the great and good, still linger in sweet yet mournful accents on our ear, and remind us that we cannot by mere words do justice to his memory. Let us recall to your notice an incident in our own history, which will show you something of the large-heartedness and liberality of him we mourn. It was when our Association was entering upon the eighth year of its existence, in the winter of 1827, that Dr. Francis, through the Board of Direction, made a proffer of his professional services to any of the members of this Association who might require them. We cannot now tell the result of this kind offer, but we know full well that many will for ever bless his memory for the unpretending charity that he so freely dispensed."

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The pressure of opinion of the English profession against consultation with homœopathists has been too great for Mr. Fergusson, who has taken the stool of repentance. In a note to the London Journals he says, "I beg to state for the future I shall feel it incumbent on me to decline any meeting or so-called consultations with homœopathic practitioners." All the leading English physicians and surgeons who have been suspected of these delinquencies, have now placed themselves right on the record. Although it is manly and noble in a man occupying a high official position to acknowledge his errors, and promise reform, still it is not a little humiliating to learn that a prominent member of an honorable profession can willingly depart so far from its established rules of ethics, as to incur the just censure of his brethren.

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We take pleasure in stating that Sam. D. Crawford, M.D., the heroic surgeon of Fort Sumter, has been appointed a major in the regular army. On the occasion of the bombardment of that fort, he performed the part of a commandant of a portion of the ordnance, and exhibited great bravery. On his arrival in New York, Dr. Crawford became an active and most efficient agent in organizations for supplying needful hospital supplies to meet the apparent emergency: government has but justly rewarded true merit. We understand that Dr. Crawford left the medical staff with much reluctance and regret. He has been ordered to report to Gen. Rosencranz, in Western Virginia.

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We desire to call the attention of our readers interested in improvements in our army equipments, to the communication on the *improved* method of supporting the knapsack.

Anything which lightens the burdens and lessens the fatigue of the common soldier, is a national benefaction and a contribution to the cause of charity and life conservation. The new contrivance appears to be *Sanitary* in the highest sense. We earnestly recommend an attentive examination, and if found to be what it purports, an immediate adoption of the invention throughout the army.

Progress of Medical Science.

THE ESSENTIAL OIL OF MATICO, WHETHER PURE, OR COMBINED WITH BALSAM OF COPAIVA, IN THE TREATMENT OF GONORRHŒA.

DR. A. FAVROT has communicated to *l'Union Médicale*, an article on the use of Matico in blennorrhœa.

Matico (*piper angustifolium*) is a South American pepper-plant (lentisk), first introduced into France by Mr. Dorvault, at the time of the London Exhibition, when it was presented as a powerful astringent, and an excellent antihemorrhagic, and the various formulæ given by its importer all agreed with these properties. At present preparations of matico are largely employed in *materia medica*. In 1855, the decoction of leaves of matico, administered internally by English physicians, having given good results in cases of gleet, I was induced to make some experiments with it. Matico has, however, long been used in Peru in analogous cases; thus in the *Medical Flora*, published in that country, we read in Vol. I., page 28, the following remark: *Incolæ ad gonorrhœas et ulcera cancrosa a lue venerea ortas extirpendas, decoctum affatim hauriunt.* In another direction, Mr. Grimault, the successor of Dorvault, in continuing the researches of his predecessor, acquired the certainty that matico owed its properties to the large quantities of essential oil contained in it, and which had not been turned to account in the majority of the preparations hitherto employed. Having obtained a certain quantity of this essential oil, he had capsules prepared with it, and, at my desire, intrusted me with their trial. I had already employed matico in the form of decoctions, injections, and extracts, effecting a cure in some cases, and failing in others, and being confident in these data, I placed great reliance in the employment of the essential oil. The results were, in fact, most satisfactory; but the diuretic action was so strong, that this medication, notwithstanding its advantages, still offered serious drawbacks.

Finally, by dint of essaying and experimenting, we succeeded in obtaining a preparation, which appeared to be perfect, by combining the essential oil of matico with balsam of copaiva, in the following proportions:

Balsam of copaiva, 100 grains,
Essence of matico, 5 grains,
Magnesia, quantum suff.

for 100 pills, coated with gluten upon Raquin's process. Each of these pills contains one grain of the balsam of copaiva and 5-100ths of a grain of the essential oil, representing fifty grains of matico employed. In this combination the copaiva completely loses its characteristic taste, and by the addition of this essence, which is somewhat similar to the essence of peppermint, I remarked not only that the capsules thus composed were more active than the capsules known as Raquin's and Mothes', but further, that they never occasioned unpleasant eructations.

I have treated acute and chronic blennorrhœa with this preparation during nearly four years, and I am at present strictly certain of its efficacy. I will divide my observations into two classes: acute and chronic; the local mode of treatment sufficing for the first category, requires the injection of the capsules; the second, the local treatment, is effected by injections of water distilled from saturated matico, which Mr. Grimault prepares in the following proportions:

Matico, one pound,
Water, two "

to obtain 1000 parts of water. It is essential to leave the matico in contact with cold water during twenty-four hours before distillation.

OBSERVATIONS ON BLENNORRHŒA TREATED AT THE OUTSET AND CURED BY SIMPLE INJECTIONS.

Obs. 1.—M. X., twenty-two years of age, a government clerk, fair, and of lymphatic temperament, consulted me for a greenish running, that had appeared the day before: inflammation of the *meatus*, sharps pains in making water, nothing in the groin or in the testicles. Six days previously he had received the disease from a woman just through her courses. One injection morning and evening. At the end of two days he was sensibly better; the running had changed from a greenish white to a yellowish white: I continued the injections. A fortnight later I saw M. X. again, when he told me that he had been completely relieved on the seventh day of the treatment, and that he had delayed visiting me until assured of his cure.

Obs. 2.—M. X., forty-two years of age, gentleman; had contracted disease from a woman four months pregnant; he experienced frequent necessities to make water, and an itching along the canal. On the fourth day, upon waking, he perceived a drop on the meatus, by pressing the gland. I saw him at two o'clock, when the running had declared itself; it was a muco-purulent liquid. I gave him an injection morning and evening; the next day he was sensibly better, and on the fourth day he was completely cured. Two months later, M. X. called upon me in the same state; and this time the injections had to be continued during eight days. I could multiply observations of this sort in which distilled matico water always produced satisfactory results; but it is important that the running should be treated at the outset, and that the patient maintain a strict regimen.

OBSERVATIONS ON SUB-ACUTE BLENNORRHŒA.

When inflammation has existed for some time, and the running has acquired a certain density, I have very rarely obtained a definitive result with injections alone; but have then combined it with capsules of matico.

Obs. 1.—M. X., artist, twenty-nine years of age, dark, sanguine temperament, consulted me for blennorrhœa six weeks old; various treatments had already been employed without success. Upon my advice, he took an injection morning and evening, and on the third day he thought himself cured; but two days later, in consequence of a slight deviation from his regimen, the running reappeared, and apparently more abundantly. Fresh injections were followed during eight consecutive days, when he was apparently cured; but without any known cause he had a relapse. After ascertaining that there was no contraction of the canal I decided to prescribe matico capsules, conjointly with the injection, and upon the seventh day the patient was definitively cured.

Obs. 2.—M. B., law student, twenty-two years of age. Blennorrhœa of more than six months' date. He had tried every possible mode of treatment; capsules of every species and injections of all sorts. He consulted me regarding a drop that appeared every morning upon waking; he was alarmed, because under the influence of the slightest deviation of regimen, either respecting diet or coition, he experienced a greenish-yellow running instead of one drop. After ascertaining that no contraction existed, I ordered him to take twelve capsules and two injections *per diem.* This treatment was very regularly followed during a fortnight, and at the end of that time I required another fortnight of prudence and abnegation, and the cure was complete.

Obs. 3.—M. X., sculptor, thirty years of age, fair, lymphatic, blennorrhœa of twelve months' date. He was tired of treating it, and had decided to do nothing more for it; but a marriage he had in view induced him to try my mode of treatment, on the condition, however, that he should not be required to change his manner of living; using coffee, wine, and liquors, but not to excess. After using the capsules and injection for twelve days, he was cured; nevertheless, on account of the long standing of the malady I required him to continue the treatment one week longer. A month later, M. X. came to thank me and announce his marriage.

Summary.—It is evident that matico, or the active principle which it contains, is not a universal panacea in all cases of runnings, and that when there is a determinative cause, such as a contraction (which should always be ascertained), or an affection of the prostate, and especially any weakness or relaxation of the seminal vesicles—for I have often seen runnings produced by inflammation caused by the sperm remaining upon the mucous membrane of the urethra, without the latter being previously lubricated by the prostatic fluid (as it happens in cases of spermatorrhœa)—it is evident, I say, that when there is a distinct cause, matico will produce little or no effect; but I wish to point out, that in cases of simple, acute, sub-acute, and chronic runnings, preparations of matico have given me the most certain and definitive results.

In the case of women, I have obtained, and daily obtain, even more remarkable results in cases of chronic leucorrhœa. These yellowish-white runnings, which are brought on by slight fatigue, or excess of any sort, or even simply before or after their periods, often undergo such sudden modifications, that although harmless at certain times, they may become very dangerous. The internal use of the capsules, and especially the direct application of a lint or cotton dossil, previously rolled in pulverized matico, and left in contact with the parts during twelve days, have afforded me excellent results.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

OBSTETRICAL SECTION.

March 18, 1861.

Dr. Underhill, President, in the Chair.

THE PATHOLOGY AND TREATMENT OF WHOOPING-COUGH.

Dr. Gardner was convinced that pertussis was purely a contagious disease, partaking of an inflammatory as well as nervous character. The inflammatory symptoms were the first to show themselves, and continued from three to ten days, and were followed by the nervous troubles which manifested themselves in the shape of spasmodic cough. This peculiar cough he did not look upon as characteristic of the disease, neither did he think it was a condition that was dependent upon any trouble in the brain. The paroxysms, lasting from a quarter of a minute to a minute, were sometimes so severe that they were attended by death: having lost one of his own family by such an accident, he felt a melancholy interest in the subject. Accompanying the cough was a discharge of thick ropy mucus, secreted from the bronchial mucous membrane, which was frequently thrown off by vomiting, to the great relief of the sufferer. He stated that those who vomited easily, had the disease generally in a mild form. Pertussis was emphatically a disease of childhood, although persons 50 or 60 years of age have been known to be attacked by it. The disease was often complicated by dentition, diarrhœa, pneumonia, hydrocephalus, and convulsions, the two last being attended with the most danger. The treatment of the disease was modified very much by the complication. In the simple form he generally prescribed tolu, ipecac, or tartar emetic, during the continuance of the inflammatory symptoms. He did not see the necessity of applying counter-irritation, unless the inflammation was excessive. During the spasmodic stage he made use of antispasmodics, and of them he was disposed to recommend hydrocyanic in doses of one drop every three or four hours. This was sometimes combined with belladonna. In anæmic children the acid was sometimes combined with bark, while in other cases he was in the habit of prescribing the ferro-cyanuret of potassium, according to the following formula:—℞ Potassæ ferrocyanuret. ʒ s. aq. cinnam. ℥ ij. M. *Dose* 6 to 10 drops three times a day. He had also given the ferri-ferrocyanuretum in doses of ⅛ grain, three or four times a day, with marked benefit.

Dr. Jacobi stated that, in general, whooping-cough occurred but once in the same individual, and was contagious, and seldom seen in isolated cases. It was also epidemic, and had a period of incubation varying from three to fourteen days. The vagus and recurrent nerves seemed to be the parts affected in the disease, and the symptoms were in the main of a variable character. He stated that it was common for a child, in the act of coughing, to make 20 expiratory efforts in a minute.

Dr. Barker thought it was settled to consider the disease of a specific character, and dependent upon some constitutional cause; and inasmuch as morbid anatomy disclosed so little of its essential character, the treatment of the disease was mainly empirical in character. The remedies which had been most in favor were, hydrocyanic acid, belladonna, nitric acid, quinine, and nitrate of silver. In his opinion, the intensity of the poison modified the effect of remedies, although in the early stage it made very little difference which of the afore-mentioned remedies were used. Hydrocyanic acid was the most popular, the general belief being that it had the power of abridging the duration of the disease, and abating its severity. In his hands, however, it had failed in producing such an effect. In 1855, he had tried the topical treatment of nitrate of silver to the fauces, but the advantages which he derived from it were not of such an encouraging character as to persuade him to continue the practice; the chief objection to it being the alarm which it occasioned the child during the application. In persons, however, of 18 or 20 years of age, especially where ulcerations existed, he still used it. Belladonna was generally with him an uncertain remedy; chloroform he looked upon as a very valuable remedy, especially in cases where there was a tendency to cerebral plethora; he had often been able to anticipate an attack and prevent its occurrence by the timely use of the remedy. He did not think that the anæsthetic had any influence in cutting short the disease, but that its main advantage consisted in mitigating the *severity* of the disease and lessening the chances for convulsions. He was in the habit of adopting something like the following general plan of treatment:—In the first stage, antiphlogistics in the form of tinct. of the aconite root, and rubefacients applied over the upper part of the chest anteriorly and posteriorly. After inflammatory symptoms had passed, the nitric acid lemonade, made by adding 50 or 60 drops of the dilute acid to a tumblerful of water: another favorite prescription with him was the following—℞ Syr. lactucarii ʒ i., ext. belladonnæ gr. ⅛, sulph. quinæ gr. ⅛. M. To be taken three or four times a day.

Dr. Shanks considered the inflammatory condition a secondary effect of the disease. He had been in the habit for many years of treating the disease in its early stage with gentle emetics and cathartics, which had the effect of ameliorating the distressing symptoms very sensibly. After this, 3 or 4 grains of carbonate of iron were prescribed several times a day. In conclusion, he suggested the propriety of the inhalation of the impalpable powder of nitrate of silver, according to the plan proposed by Dr. Brown, of Baltimore.

Dr. Barry stated that he was then treating a bad case with simple assafœtida, in connexion with the remedy belladonna. He cited a case in which convulsions seemed to have been produced by its use. He had often seen magical effects from the use of the salts of tartar.

Dr. Sewall stated, that inasmuch as pertussis was a self-limited disease, all the remedies which were used by the different physicians only tended to mitigate the severity of the more urgent symptoms. He considered change of locality of more importance than anything else, though he had seen a great deal of benefit from the combination of belladonna and alum, as recommended by Dr. Meigs, of Philadelphia (℞ Alum grs. xxv., ext. belladonnæ gr. j., mucilage, syr. zingiber. aq. āā ℥ ss. M *Dose* ʒ i., three times a day).

Dr. Garrish had been in the habit for the last ten or twelve years of applying an assafœtida plaster over the chest and epigastrium with very satisfactory results; had also used Roche's embrocation and a liniment of ol. succinæ, ol. olivæ, and ol. caryophylli. His internal remedies consisted of extract of belladonna, and minute doses of mucilage, also valerianate of zinc, and extract of hyoscyamus. He considered change of locality and strict attention to diet of the utmost importance.

Dr. J. Foster was also an advocate of a change of locality for the treatment of this disease. He used rubefacients, and had known the following prescription to have acted favorably; ℞. Potassæ sulphuret. gr. x. syr. acaciæ ℥ ij.; dose ʒ i. three times a day.

Dr. P. Van Buren was in favor of the old remedy of carbonate of potash, and cochineal with the belladonna plaster.

Dr. Taylor considered the disease to be essentially nervous in character, having its seat in the recurrent laryngeal, and hence the applicability of belladonna and chloroform.

Dr. Underhill stated that children had been born with the disease, when it was simultaneously existing in the other members of the same family, and that it was fatal in proportion to the early age at which the patient was attacked. He considered that the disease was catarrhal in its character, associated with disordered nervous action. Hydrocyanic acid, in his hands, had often cured the disease in five or six days. His formula was as follows:—
℞ Acid. Hydrocyanic. gtt. xvi. syp. gum. ℥ ii.

The meeting then adjourned.

Correspondence.

THE AUTHORITY OF MEDICAL MEN IN THE ARMY—RENEWED.

[To the Editor of the American Medical Times.]

Sir:—Upon this topic, allow me room for a few more words prompted by the allegation of an army officer of high grade, to whom my remarks were presented; that they demand a division of authority in the Army. Whoever attends in candor to the topic in question, cannot help perceiving that the value of this allegation turns wholly upon a misapprehension of the case; and that such division will have no existence in fact, *unless* it is *assumed* by the military authority. Nor is it at all difficult to find *whence* the misapprehension. It arises from the supposition, that in granting our demands, the strictly commanding officers would yield, within certain limits, authority which belongs to them to exercise.

But how actually stands the case? These officers do not now exercise *such an authority* with regard to the sanitary condition of the rank and file, as they do with respect to their military duties; nor do they now institute sanitary regulations, and exact obedience to them, in virtue of authority by which they are empowered to act as military officers, or as exécutors of martial law. If they do aught with respect to the former, it is done in obedience to the dictates of sanitary science, which experience has shown, we cannot be *unmindful of* without risk of the lives and health of their men. That the former and the latter, i. e. the military and sanitary, are sufficiently distinct, is seen in the fact that, whereas every soldier is instructed as to his martial duties, in order that the knowledge may enable him to avoid the penalties of disobeying martial rules, he is not, as a subject of military discipline, instructed in anything relating to his sanitary duties, and the rules which he should refer to for the maintenance of health and physical strength. Accordingly, the military authority, or what dominates *his action as a soldier*, is officially exercised by command "on penalty," while his action with regard to health is simply "required," and is not mandatory. Within these latter limits the military officers are not empowered to command on military penalty, yet within this latter sphere the authority to enforce obedience is as much required as in the former. If this authority be demanded, it should be conferred upon the medical officers; and thus exercised, it would finally be *accessory* to, and not a detraction *from* that of the military authority. The military officer is empowered to enforce obedience to military rules, in virtue of his military knowledge; and precisely so should the medical officer be empowered to enforce obedience to the rules dictated by his knowledge. A failure to maintain military obedience, as now above distinguished from sanitary obedience, is no more disastrous than a failure to maintain physical efficiency in the army; and my impression is, that the latter can be accomplished by conferring on medical men the right to enforce certain sanitary rules as mandates. But if conviction that this is desirable is not effected by the simplest consideration of the subject, there can be but little hope in further argument.

Yours, &c. Rufus K. Browne, M.D.

New York, Aug. 20,
27 Bond street.

DR. PETERS'S RENUNCIATION OF HOMŒOPATHY.

[To the Editor of the American Medical Times.]

Sir:—Your Journal of Aug. 17th contains a communication from J. C. Peters, M.D., late editor of the *North American Journal of Homœopathy*, headed "Renunciation of Homœopathy;" the object of which is stated to be, to put on record that the writer has "long since resigned all connexion with any and every sectarian medical society and publication," and that he "now most distinctly does not believe or practise according to *any one medical dogma* or exclusive system."

Allow one of your readers to remark, that it seems somewhat strange to him, that Dr. P. has not made this renunciation before; *now*, when homœopathy is on its last legs, and is getting to be considered by the public, as it always has by the honest, intelligent part of our profession, as an artful imposture, and transcendent humbug, it requires too great sacrifice of feeling and interest, to cast it aside, and with an apology, such as it is, endeavor to gain a *status* in a profession he has done much to disparage and misrepresent. For one, I must acknowledge, I cannot receive Dr. P.'s apology as an adequate atonement for his course during nearly the whole twenty years of his professional life; for, besides the impossibility of conceiving of any satisfactory apology, from a man of known talent, knowledge, and experience, for countenancing and encouraging such a humbug for so long a time, inasmuch as no apology can be offered, which will not impeach either a man's honesty, or his reason and common sense; Dr. P., by his own confession, has, in this matter, been always sinning against his own conscience and understanding, for he informs us that "all his natural instincts have ever been opposed to one-ideaism in religion, politics, science, and his much loved profession," that he "has never been a convert to the use of infinitesimal doses," that they have been "so repugnant to every fraction of common sense, that he has felt absolutely *degraded* when making what I (he) conceived to be *necessary* trials with them"—why necessary, unless he wished to believe in them? There must be some extraordinary motive to induce a man to persevere deliberately in giving such doses, when he "always felt that he was doing something foolish and wrong in giving them," that he "was dealing with quantities so minute and so powerless, that it was trifling with the lives of his friends and patients to depend on them in serious cases, and with their time and comfort in milder attacks" (nothing is said about the honesty of taking their money under false and frivolous pretences)! Notwithstanding all this, Dr. P. acknowledges his readiness, at any time, to "*fall back on the infinitesimal doses*, if he feels obliged to," but so far, his "careful trials of them in various cases, have not convinced me (him) that they have any efficacy whatever." It is very obvious that, with Dr. P. as many others, homœopathy was a foregone conclusion; it was popular, fashionable, and profitable; it gave a young man a start; it required no study, only writing down and comparing of symptoms, as found in books, and met with in disease; this required no thought; was, indeed, an agreeable amusement, well suited to a fanciful, speculative, indolent mind, given to transcendental notions, and weak enough to construe the abuses of medicine and the failures of individual practitioners, as legitimate reasons why the entire science of rational medicine should be rejected. Indeed, the reasons assigned by Dr. P. for adopting homœopathy are singularly frivolous and unsatisfactory: They are—1st. That many of his relatives, when he was a young man, were treated by Drs. Gram and Grey; 2d. That he found, when clerk in a drug store, that many drugs and medicines were "adulterated or spoiled;" 3d. That many of his relations had died when treated by "physicians of the dominant school." Now I can understand how such reasons as these might operate on the mind of a child, or even prejudice a young drug clerk, but how they could lead an adult cultivated mind of ordinary capacity, to conclude that *homœopathy was true*, is indeed a mystery. The logical dependence of the conclusion on the premises is not very obvious. Dr. P. may be a man of ability, but it is certain he is not a very careful or logical reasoner; and it is not creditable to his intelligence that it has taken him twenty years to discover the fallacies and absurdities of homœopathy. Besides, most men would hardly feel justified in making experiments, or adopting a belief, which required them to sacrifice their "common sense," and which induced a consciousness of self-"degradation." Some men, however, seem willing to pay even so heavy a penalty for the solid advantages such a homœopathic faith carries along with it—"*Credo, quia impossibile est!*" Dr. P. was "early convinced" that the "Homœopathic Materia Medica" was very visionary and unreliable. Why, then, not abandon it? Why undertake an impossibility of "giving it a practical and common sense shape?" Why adopt the dogma "*Similia*," etc., as true and practise upon it, when it was for a long time a complete "stumbling-block, and utterly opposed to reason?" All this shows, as I have stated, that a belief in homœopathy was a foregone conclusion with Dr. P., and that he was influenced, and has been, throughout his whole professional life, by other motives than a regard for science and truth. It is true, that he found out at last a method of explaining the "*similia*" dogma, so as to make it accord with the "*contraria contrariis curantur*" principle, and reconcile it with common sense and acknowledged facts, viz. by resolving it into *alterative action*, on the ground that *similarity* means "*a slight degree of difference;*" for "a drug," we are told, "which acts similar to the action of any given disease, also differs somewhat in its action, and ultimately may exert an alterative effect." To a common sense observer, it would seem easier and wiser to adopt the allopathic or antipathic theory of the mode of operation of medicines at once, instead of blindly practising on the "similia" dogma, believing it to be absurd and "opposed to reason and common sense," until one day it happened to occur to Dr. P. that his dogma "*similia*" was all the while only an "apparent truth," "a fragment of the great law, "*differentia differentiis curantur*," in short, only *allopathy* in disguise! But it is somewhat remarkable, that any one who has read the "Organon" as much as Dr. P. probably has, would not sooner have discovered that his explanation of the *alterative* action of drugs is the very one given by Hahnemann, although, doubtless, subversive of his fundamental dogma, "*similia*," etc. "It is true," he remarks, "that even small doses produce primitive effects that are perceptible; but the *reaction* made by the living organism never exceeds the degree that is requisite for the re-establishment of health." Hence, *to prevent too great reaction*, he hit upon infinitesimal doses, for, says he, "when the doses are weak, no vestige ever remains, because in homœopathic cures, the living organism never *reacts* beyond what is absolutely necessary to bring the disease back to the natural state of health" (*Organon*).

It is this *reaction*, which brings about "a state *different from that presented by the disease*," which Dr. P. truly says, is always necessary for a cure—and this is *allopathy*. It is equally evident that if the medicines employed act *similarly to the disease*, their effects, in all dangerous cases, would be likely to prove fatal. Suppose, on the other hand, that homœopathic remedies cure disease by exciting a *new and analogous* disease (for Hahnemann distinctly says they must *not be of the same species*) then they must cure on the *revulsive* principle; so that in either case the homœopathic law "*similia*" is out of the question. And then look for a moment at the absurdity of supposing, as Hahnemann asserts, that the organism is more feebly affected by natural diseases than by medicines, even in infinitesimal doses! But even if we could excite an "artificial disease" more powerful than the natural one, it by no means follows that it must necessarily interfere with, or overcome the latter.

But my aim is not to show the absurdities and jugglery of the homœopathic system; it has had its day, played out its rôle, and now retires to make way for some other fresher humbug. Its doctrines have become stale, and its practice unprofitable. Its votaries, having ridden their hobby to death, now hope to gain a respectable *status* in the regular cavalry. As one of the privates in this grand army, I protest against their admission. They have brought too much injury and disgrace on a noble profession, to have their offences pardoned quite so easily. They should, like other deserters to the enemy, be made an example of, to deter others in future from similar treachery; and especially so, since rational medicine, as Dr. P. well knows, is truly Catholic, and allows the largest liberty to all her votaries—the freest range to all the faculties; and stimulating them all by the highest and noblest motives that can operate on the human mind. Dr. P. well knows, too, that homœopathy is her special abhorrence; repugnant, as he acknowledges, to common sense; setting aside all that has been learned from observation and experience from Hippocrates down; setting up a false and nonsensical dogma by which all medical truth is to be gauged, and all researches circumscribed; aiming to establish a new system and a new school, which repudiate nature; making disease *spiritual*, and combating it by material substances, so attenuated and diluted, as to develop their imaginary "*spiritual virtues;*" constantly depreciating, if not slandering and reviling scientific and rational medicine, and its cultivators and practitioners; and all this has been done by Dr. P. persistently for a series of years, while, at the same time, he has considered the homœopathic law "*similia*," etc., as only an "apparent truth," and indeed a "fragment of *the old established law* '*contraria contrariis curantur*,' *the greater law of alterative antagonistic action which has been practised upon for ages*."

Now, if Dr. P. will refuse to consult with homœopathic practitioners, if he will notify the public through the daily press that he has *entirely renounced homœopathy* (not, that *he does not practise according to any one medical dogma* or exclusive system, for this dodge, though a clever one, will no longer answer), let him inform those families who employ him because they consider him a homœopathic physician, that he is not, but belongs to the "old school" (they understand what this means), and then we will read his "short articles on *pulsatilla*, *agaricus*, and other remedies" which he proposes to furnish for the readers of the Medical Times; and especially since we are assured that "it is not at all necessary to use them in infinitesimal doses, nor always according to the *homœopathic law*,"—and thus, if any real addition to our knowledge of the materia medica has been made, I, for one, will freely and openly acknowledge it, and, after a suitable probation, recognise him perhaps as a practitioner.

Contraria Contrariis.

NO RENUNCIATION.

[To the Editor of the American Medical Times.]

Sir:—In your last week's issue you published a *pronunciation*, to which mine was one of the names appended, and superscribed the article "*Renunciation of Homœopathy*."

Your heading and editorial "explanation" misrepresent altogether my position. I never claimed to be a "practitioner of Homœopathy." I am a Doctor of Medicine, by virtue of a regular course of medical education, and a diploma granting me such degree; and in accordance with my *right*, thus conveyed to me, and of which right no man or cabal has the power to deprive me, I make use of whatever remedial agent, or practise in conformity with whatever medical principle or principles my own best judgment dictates. I do not *renounce* or *denounce* Homœopathy, Allopathy, Hydropathy, or any pathy. But I do denounce, as being, in my judgment, unprofessional, the labelling oneself to the public as belonging to any certain school or sect of Medicine; and I also contemplate with pity that man who is so entirely within the grasp of bigotry as to voluntarily resign any portion of his legitimate privileges and resources in the practice of the healing art.

You will please do me the justice of publishing this correction, as I must presume that you certainly could not have so headed the article referred to, had you given the time to peruse it before publication. Yours, &c.

Ed. P. Fowler, M.D.

84 E. Fifteenth st., *Sept.* 2, 1861.

Recent Inventions.

IMPROVED METHOD OF SUPPORTING THE KNAPSACK.

BY AN ARMY SURGEON.

We have been shown an ingenious, and at the same time an extremely simple contrivance for supporting the knapsack, and relieving the shoulders and chest. It consists in a *sash* attached to the belt, and pressing by a broad surface against the back.

By means of it, the knapsack is supported by the hips and loins, and the weight is distributed over the largest possible surface, and placed in the position most easy and endurable for the soldier. The sash is made so that it can be dropped, and the knapsack is then carried by the shoulders alone as at present.

In this manner, the different sets of muscles and the different points of support are alternately relieved. This contrivance is, in our opinion, one of immense advantage to the soldier, and will do a vast deal to lessen the disastrous effects of long marches.

It will be of special value in cases where men are obliged to fight with knapsacks on, as it will relieve the shoulders, chest, and arms, and take away the temptation and the necessity of throwing their knapsacks away.

Each shifting of the load will be worth to the soldier at least half an hour's rest.

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Plagiarism.—The Pacific *Med. and Surg. Jour.* charges Dr. Slade, of Boston, with copying in his Prize Essay on Diphtheria the Editor's translation of Bretonneau, without alluding to the source whence it was derived.

Army Medical Intelligence.

The Medical Board for the State of Connecticut, consisting of G. W. Russell, M.D., of Hartford; P. A. Jewett, M.D., of New Haven; and Ashbel Woodward, M.D., of Franklin; have recommended to the Governor, the following gentlemen for appointment as Surgeons and Assistant Surgeons in the Connecticut Volunteers. For Surgeons, J. B. Lewis, M.D., of Rockville; with 5th Regiment, M. C. Leavenworth, M.D., of Waterbury; H. P. Stearns, M.D., of Hartford; Francis Bacon, M.D., of New Haven; F. L. Dibble, M.D., of New Haven. For Assistant Surgeons, W. C. Bennett, M.D., of Danbury; with 5th Regiment, Samuel McClellan, M.D., of New Haven; with 5th Regiment, Horace B. Porter M.D., of New Haven; — Ensign, M.D., of Poquannock; —— Stevens, M.D., of Norfolk; Edward Bulkley, M.D., of New Haven; M. T. Newton, M.D., of Suffield; E. C. Hine, M.D., of Plymouth.

Surgeons of Vermont Regiments.—4th Regiment, Surgeon, Allen, of White River Junction; Assistant Surgeon, Childs, of Castleton. 5th Regiment, Surgeon, Wm. P. Russell, of Middlebury; Assistant Surgeon, Henry C. Shaw, of Waitsfield.

Surgeons of Maine Regiments.—7th Regiment, Surgeon, Thomas Baker; Assistant Surgeon, F. M. Endyth.

Surgeons of New York Regiments.—Cameron Rifles, Surgeon, Louis Schultz; Assistant Surgeon, Russberg. 1st Regiment U. S. Chasseurs, Surgeon, J. B. Petherbridge; Assistant Surgeon, W. O. McDonald. La Garde Lafayette, Surgeon, J. Petard; Assistant Surgeon, F. Arthand. 1st Regiment L. I. Volunteers, Surgeon, R. H. Hinman; Assistant Surgeon, George F. Adams. Anderson's Zouaves; Surgeon, Morsley; Assistant Surgeon, Simpson.

Surgeons of Massachusetts Regiments.—17th Regiment, Surgeon, Isaac F. Galloupe, of Lynn. 18th Regiment, Surgeon, David P. Smith, of Springfield; Assistant Surgeon, Orlando Brown, of Wrentham. 19th Regiment, Surgeon, J. Franklin Dyer, of Rockport; Assistant Surgeon, Joseph N. Willard, of Boston.

Surgeons of Iowa Regiments.—5th Regiment, Surgeon, Charles H. Rawson; Assistant Surgeon, P. A. Carpenter.

Surgeons connected with the Expedition to Fort Hatteras.—Wm. S. King, U.S.N.; Wm. Malling, U.S.N.; G. S. Humphrey, Surg. 9th Reg. N.Y.V.; Julius Hansen, Surg., and Charles Heiland, Assist.-Surg., 20th Reg., N.Y.V.; Hooper, of R. I., Surg., and Clark, of Mass., Assist.-Surg. of Naval Brigade; Samuel D. Flagg, U.S.N. Surg. of Monticello.

Assignment of Duty to the New Brigade Surgeons.—We learn that Frank H. Hamilton has been assigned to Gen. Franklin's Brigade; Geo. Suckley to Gen. Kearney's Brigade; Wm. H. Church to Gen. Burnside's Brigade.

Signal Officer of the U. S. Army.—The signal officer of the Army, Major Myers, of Gen. McClellan's staff, entered the army as a surgeon. He was a student of Prof. Hamilton, and graduated at the Buffalo Medical College about ten years ago. His thesis was entitled "Sign Language for Mutes," and attracted much attention. On entering the army he projected a method of signalling which has been deemed of so much importance as to require the formation of a separate corps. Dr. Myers was at once appointed at the head of this body with the rank of Major.

Health of Troops in the West.—Dr. Charles H. Rawson, Surgeon to the Fifth Iowa Regiment, writes from Jefferson City, Missouri, under date of August 25th:—We have not had a large list of sick until the last few days. Up to two days ago, all the diseases that prevailed were diarrhœa, little dysentery, intermittent fever, and pneumonia. But in the last two days, the type of fever has changed to the remitting character, and will probably run into continued.

I attribute it to the constant exposure to hot sun, and cool nights, and constant scouting, and the diarrhœa to eating large quantities of green apples, peaches, pears, corn, and grapes, all of which the men will eat *ad libitum*, with or without permission. The constant firing into cars, and at scouting parties, by the rebels, gives us some surgery, both on themselves, and our own men.

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VARIOLOID AT FORT MONROE.

[Army Correspondence of the American Medical Times.]

In reply to a communication from Dr. Martin, which appeared in the Medical Times for August 17, I have to say, in the first place, that I am misquoted.

I said that "there have been no authenticated cases of *variola* in this division of the army," and not as stated, "no cases of *variolous disease*."

Dr. E. K. Sanborn, late Post Surgeon at Newport's News, in his returns to the medical director for the post, for the month of June, reports that five cases of *varioloides* occurred in the regiments (all in the 7th N. Y.) at Newport's News, and reports *no cases of variola.*

His consolidated report is now on file in the Medical Director's office. No returns of variolous disease came from the regiments quartered in the vicinity of the fort, nor from those encamped near Hampton.

Dr. Eisenlord, surgeon of the 7th Regiment New York Volunteers, certifies,

(Copy)

Camp Butler, Newport's News,
Virginia, *August* 24, 1861.

I hereby certify that there occurred in the 7th Reg. N. Y. S. Vols., of which I am the surgeon, five cases of *varioloides* during the month of June last.

I certify that these men had all been previously vaccinated, and that the disease took a mild and modified form. No cases of variola proper occurred in my regiment.

(Signed)
A. M. F. Eisenlord,
Surgeon, 7th Reg. N. Y. S. Vols.

The U. S. Army medical reports specify Variola and Varioloides, as two distinct diseases of the same class.

In regard to the neglect of mentioning the fact of Dr. Kimball's temporary connexion with the U. S. Hospital at this post. . . He had no charge of it till after it had been organized. He was in charge at the date of my letter, but not by direction; was not recognised as a medical officer of this division of the army by the bureau at Washington.

As concerns the operations, the honor of which Dr. Martin alleges that I have unjustly deprived Dr. Kimball of, if your readers will refer to the Medical Times of July 20, they will perceive that I spoke of the operations and dressings *immediately following* the fight at Bethel, June 10, 1861, and I reiterate that all said operations were performed by, or under the supervision of, Dr. Cuyler, our Medical Director. At that time, neither Dr. Kimball nor any of his assistants were even present at this post.

In regard to the statement of Dr. Cuyler's visiting the General Hospital "now and then, sometimes at intervals of ten days," the facts are simply these:—Dr. C. ceased intentionally from visiting the hospital as frequently as he would otherwise have done, as he could not harmonize with Dr. Kimball. When the order came from Washington for the Medical Director to inspect all the camps and hospitals of the division at least twice a week, he then visited the General Hospital twice a week regularly, and inspected it thoroughly. He is a strict and indefatigable observer of discipline, and consequently did not suit those who seemed indifferent to responsibility, and who were not held to a strict account with regard to public property. It is known that officers of the army are held strictly responsible for every article of public property intrusted to their care.

I regret to have to say, that Dr. Sanborn, in his letters of July 27 and Aug. 3, is in error in regard to the time of arrival of ambulances at this post. He writes under date of July 20, "Up to within a week there has been no ambulance or wagon of any shape to send into the field." By reference to the receiving books of the Quartermaster's Department, I find that six two-horse ambulances or spring wagons were received here in June, full a month before the date of Dr. S.'s letter, after which further instalments soon followed of large and small ambulances, wagons, and transport carts, till all of the present good supply had arrived. An ambulance was sent to Newport's News, on June 29. Capt. Tallmadge, chief quartermaster of this department, in a letter to me dated Aug. 10, 1861, giving the above facts, further states, concerning ambulances, "Another was afterwards sent to Newport's News at the earnest solicitation of Dr. Sanborn; it went *with* him, and he neglected to take charge of it; it fell into the hands of the German regiment,[*] and was broken and returned. I might state also that Dr. Cuyler frequently requested me to send the ambulances to Newport's News, before I did."

(*Extract from Capt. T.'s letter of Aug.* 10.)

At the time of the Big Bethel affair the Medical Director had no official knowledge of the proposed movement. The first intimation to him of the occurrence of the fight, was the arrival of wounded at the hospital in impressed wagons.

Charles B. White,
Assistant Surgeon U. S. Army.

Fort Monroe, Va., Aug. 24, 1861.

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HEALTH OF WILSON'S ZOUAVES.

MEDICAL MATTERS AT FORT PICKENS.

[Army Correspondence of the American Medical Times.]

Camp Brown, Santa Rosa Island,
Aug. 2, 1860.

The 6th regiment has suffered but little with sickness since leaving Staten Island. The 15th of June we sailed from New York, in the steamer Vanderbilt, arriving at our destination on the 24th. On the 25th the men disembarked, tents were pitched, and the routine of camp life began.

Santa Rosa island is nothing but a huge sand bank; scarcely any vegetation exists; a few stunted trees of the coniferous species are scattered here and there. A gentle breeze prevails nearly the whole of the twenty-four hours. The thermometer ranges from 85° to 95° in the shade.

During the voyage several cases of delirium tremens occurred. A stimulant treatment was pursued, and the results were satisfactory. One man, the worst case we had, broke suddenly from his keepers, rushed on deck, sprang overboard and was drowned.

After the voyage terminated the men were engaged daily for three weeks in unloading stores from the Vanderbilt. Many, being unaccustomed to so hot a climate and such continued exposure under a broiling sun, in the surf, through careless habits were seriously sunburned. A few suffered from coup de soleil.

Diarrhœa made its appearance the first day after we landed, and continues up to the present time. A few cases of dysentery have occurred, none of them serious. It has been my custom in the majority of cases that have presented for treatment to administer a free dose of oleum ricini, or sulphate of magnesia, followed frequently by a second one, then to give small doses of camphor, opium, and ipecac, in the form of a pill. As yet no cases have presented that were not amenable to this treatment. Sometimes mercurials were indicated and administered.

Several cases of rheumatism have occurred, one or two of them quite serious; also a few cases of sclerotitis and conjunctivitis, due to the small particles of sand that, blowing about in the wind, reach the eye, and partly, perhaps, to the continual glare which prevails everywhere, from sunrise to sundown. Certainly in my mind, due to the last cause are two cases of amaurosis now under treatment. One of them, a drummer, who lost his left eye in Mexico, is now completely blind in the other. I have procured his discharge, and send him home to-day.

We have eighteen men now in hospital. There is more sickness at the fort, among the regulars, than with us. This, no doubt, is mainly due to the close confinement and crowded condition of the men in quarters, evils which cannot be avoided. Even this is hardly sufficient to account for the difference in the sick returns. Our regiment must certainly be composed of unusually healthy material for volunteers.

Dr. Campbell, senior surgeon at Fort Pickens, is an able officer, untiring in the discharge of his duty, and withal exceedingly courteous in his treatment of the medical staff of this regiment. He has been twenty years in the U. S. service. I cannot at present recall the name of the first assistant surgeon. Dr. Weed, second assistant, recently examined and admitted to the U. S. Army, has charge of a hospital, recently erected, located about one-fourth of a mile beyond our camp. To this the sick in the fort most in need of quiet and fresh air are sent. Yesterday a man died there of typhoid fever. Two or three other cases of the same disease are convalescing.

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[*] 7th N. Y. Vols.

P. C. Pease,
Surgeon 6th Regt. N. Y. S. V.

Medical News.

OBITUARY.

Michel Nelken, M.D., died on the 2d of July, of yellow fever, at Havana, Cuba, aged fifty years. He was a native of Poland, a graduate of medicine in Wurzburg, Bavaria. The same degree was also conferred upon him by the Medical Faculty of Paris. In 1848, during the political commotion in Europe, he joined his countrymen in Paris, in an unsuccessful effort to restore Poland to her ancient nationality. He emigrated to America in 1853, and settled in Quebec. Finding the climate of Canada too rigorous, he removed to New York. For more than a year he was resident surgeon in the New York State Hospital, Ward's Island. In December last, he was called to a position in the Hospital established at Havana, for the relief of sailors of all nations. His knowledge of most of the modern languages of Europe, as well as his long experience in hospital service, rendered him peculiarly fitted for the place. But here he fell a sacrifice to his love of original investigation—as one special object which induced him to go to the tropics was the study of yellow fever—the very disease of which he died.

Dr. Nelken was a man of great observation and learning in his profession, having spent most of his life in colleges and hospitals. Among the subjects which engaged his attention was that of Sea Sickness, which he thoroughly investigated whilst surgeon on board the "American Eagle." His paper on this disease, published in 1856, shows great research and careful observation, constituting the most complete brochure on the subject ever produced in this country.

Obituary Record.—Died, in Cincinnati, June 22nd, William Judkins, M.D. Dr. Judkins was born in Guilford co., North Carolina, September 1st, 1788, and was consequently in the 73d year of his age at his decease. He removed to this State in 1806, and commenced the practice of medicine in Jefferson co., Ohio, in 1811. During his residence in Jefferson co., he enjoyed a large practice, and was both a successful physician and surgeon. Owing to the laborious character of his practice and failing health, he removed to Cincinnati in the year 1832, where he has continued to reside and practise, with the exception of a few months' residence in the country near Waynesville, Ohio. He was one of the oldest physicians in the profession, and had resided longer in the city, with a single exception, than any other person now living. Dr. Judkins was, as he well deserved to be called, a good man. He was by birth a member of the Society of Friends, and from early manhood was a member of the Society, and conformed to its rules in dress and language. His manners were captivating, being gentle and courteous, though firm when any principle was involved. As a physician and surgeon, he enjoyed a large and respectable reputation in this city. He had clear and comprehensive views of disease, and his treatment was prompt, decided, and simple. Although his early education was deficient, he had greatly corrected such defects by study and careful reading. During all his life, and even till within a few months of his death, he kept himself well informed of everything in his profession contained in several medical journals. A prominent and striking feature of his mind was its ability to advance with the pathology and treatment of the day. Most men of his age are strongly wedded to the pathology in vogue at the beginning of their professional career, especially for the antiphlogistic doctrines of Rusk. Such was not the case with Dr. Judkins. He was one of the *youngest old men* we ever knew. In one word, he was a progressive. While he was a good physician, he was no mean or inferior surgeon. During his life he operated nine times successfully for stone; and performed many other important operations. In 1823, he trephined a patient for a dropsical effusion within the cranium. The patient entirely recovered after many months of illness, with partial loss of reason. He sent an account of the case to the Transylvanian Medical Journal, at that time under the control of the Faculty of the Medical School in Lexington, for which he received the Honorary degree. Dr. Judkins was a member of the Academy of Medicine of Cincinnati, and was a firm supporter of the regular medical profession. He was, in one word, a good physician, a kind father, a Christian, and a gentleman. Several of his papers on various medical subjects are to be found in the pages of Western medical journals.—*Lancet and Obs.*

Marriage of a Medical Man not advisable.—It has often occurred to us, that most medical men would be the better if they remained single. We know that it is opposed to the received opinion on the subject, and we own that it has its inconveniences. But we feel confident that, in the present state of society, in which expensive luxury forms a constant element, it is next to impossible for a general practitioner to support a proper appearance in the world from nothing more than the proceeds of his professional exertions. It is the married life that urges so many to work themselves to death. They cannot bear to see their family less than they should be. Consequently they are ever on the fret. They have no leisure to sit down and think. They cannot and must not do so; and it is owing to the cares of matrimony that many, who would otherwise have been philosophers, devoted to their profession, end by becoming nothing better than routineers or professional tradesmen. In moments of real illness and danger the public do not ask whether the doctor rides or walks, is married or unmarried. All they require is that he should be at hand when he is wanted, and should be capable of performing all that is required of him.—*Medical Critic and Psych. Jour.*

The New Sydenham Society.—The third general meeting of the members of the New Sydenham Society was held at Canterbury, on Thursday, July 25th; Dr. Humphry, Vice-President, in the chair. The report and balance-sheet were read. The report showed that since the last annual meeting the number of members had steadily increased, and the demand for the works already published by the society had been such, that the whole of the second edition of those for 1859 (making a total of 3500) was exhausted. The society now numbers 3500 members; should the society reach 4000 members, it was calculated that, in addition to an Annual Fasciculus of the Atlas and the Year-book, three other printed volumes may be supplied for a single subscription. With regard to the Year-book, the council had the satisfaction of knowing that the general plan of their first volume had met the approbation of those for whose use the work is designed. Well aware that the attainment of anything like completeness is not to be hoped for, the council still confidently trusted that, should the society approve of its continuance, each recurring Year-book will be found to be an improvement on its predecessors. A considerable surplus of £1255 appeared in the balance-sheet as remaining in the treasurer's hands at the date of the audit. Of this sum more than £900 was then due, and had since been paid for the printing, etc., of the first Fasciculus of the Atlas, leaving about £400 available for the current year. With this surplus the council trusted to be able, in addition to a second Fasciculus, to afford four volumes. During the year the sum of £326 had been received from the treasurer of the former Sydenham Society, being the residuary amount remaining in his hands after the winding up of its affairs.—*Brit. Med. Journal.*

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VII.—Part II.

Diarrhœa and its relation to Dentition—Its Nature and different Forms, and their common Symptoms—Variety of its Causes—Local Irritation by Ingesta—Season and Atmosphere—Age—Ulcerous Processes and Constitutional Diseases—Nervous Influences—Obstruction to Circulation, in Portal Vein, Inferior Cava, and in the Skin.

Amongst all the morbid symptoms of early infantile age there is none more frequently attributed to dentition than diarrhœa. I say, amongst all the morbid symptoms. For we must remember that the term "diarrhœa" means nothing but the frequent evacuation of fæces and intestinal secretion from the anus. A number of causes may contribute to the same result. Many cases of diarrhœa depend on mere disorders of the intestinal mucous membranes, some result from an exalted muscular mobility of the intestinal tract, and some from direct anatomical lesions. The latter, although they have been present during life, are not always found in post-mortem examinations; injection of the capillary, and larger vessels also, will, after death, from mere change of position or other influences, change its character. It is well known, that cerebral hyperæmia which has caused death, will not always be found, the blood finding its way into other parts of the body; and injection of the vagina, the fauces, and conjunctivæ, is frequently looked for in vain after death. Thus we need not be astonished at not finding the post-mortem signs of hyperæmia in all the cases of intestinal catarrh, especially those of acute character. Those cases, however, which have taken a chronic course will be sure to exhibit anatomical changes, the nature and pathological bearing of which cannot be mistaken; in them the melanotic margins of the glandular follicle, the dilatation of blood-vessels, and intumescence of the mucous membrane, is found to correspond with the various excretions during life. These excretions, either evacuated during life, or found post-mortem in the intestinal tract, are most characteristic and the most constant symptoms, so much so that some authors have thought best, from misconceived notions upon the subject, to classify diarrhœa according to the character and abundance of the evacuations. However, there are some elements common to all and any kinds of diarrhœa, whether acute, chronic, primary, secondary, or metastatic, viz. the epithelial scales of the intestinal mucous membrane. Their rapid ejection and transformation form the essential part and nature of the catarrhal process, whether the case is one of those thousands terminating favorably, or of those rapidly exhausting and frequently fatal ones of infantile cholera, or those lingering and slowly destroying cases of tabes infantum.

Diarrhœa is excessively frequent in children during the earlier years of their lives. Many cases, brought on by mechanical irritation, appear to have a wholesome character, in removing the injurious substances from the lumen of the intestinal tract. Many other cases of common acute catarrh of the intestinal mucous membrane are no more dangerous than these, a moderate transudation and somewhat accelerated peristaltic action being the only symptoms, which often disappear in a few days. Even at the time of dentition, that is, at the period of infantile development, in which all the elements of the body, particularly the head and the glandular system, are undergoing rapid changes, diarrhœa will not often be attended with serious difficulties, especially in such children as show some tendency to hyperæmia of the cranium and its contents. But we have no right to assume that, because such a diarrhœa during dentition, that is during the first thirty months of infantile life, may not be attended with serious consequences, this very diarrhœa forms a necessary part of dentition. If any superstition has proved dangerous, it is the belief that diarrhœa during dentition must not be stopped; it has been the fruitful cause of mischief in hundreds of children. We may safely say this, as even chronic cases of diarrhœa permit of a favorable prognosis, and not even the follicular ulcerations of the colon give an absolutely fatal prognosis, except in cachectic patients.

In order to prove that there is no necessity whatever in resorting to dentition as a kind of scapegoat to explain the diarrhœa of infantile age, we need but enumerate a number of such causes on which diarrhœa is universally acknowledged to depend. The more numerous these causes are, the less necessity there is for dentition to shoulder the blame in every case; the less so, as there are but two principal connecting links between the protrusion of a tooth and the intestinal catarrh; not to speak of those numerous would-be causes dwelt upon at some length in a previous lecture. These principal links are, either nervous irritation, or the undeniable sympathy between distant parts of the same tissue. But we have seen the scarcity of cases of local stomatitis, or rather gingivitis, during the protrusion of a tooth, and certainly we cannot expect an inflammation which is not, to give rise to a catarrhal process that is.

Injurious ingesta are the prominent causes of diarrhœa in children. Purgative medicines; maternal milk overloaded with or deficient in fat, salts, or caseine, or affected by mental emotions, or by the action of purgative medicines, rhubarb, senna, salts, calomel, etc., all of which have been found in the milk, and are known to act on the nursling; artificial feeding with amylacea, either too soon, or too copious, or decomposed; super-abundance of sugar in the food; retention and putrefaction of particles of food in the mouth; retention of sugar solution from a sucking bag; the mere change of nurses, or weaning; these and other causes, will suffice to give rise to very obstinate diarrhœa indeed. Especially, the time of weaning is a dangerous one, in this respect.

Another very frequent cause of diarrhœa, is high temperature. You know that dentition will take place any year, or month, or season, but you are also aware of the fact, that the occurrence of diarrhœa is very much influenced by season and temperature. We know, for instance, that the cases of intestinal catarrh, with or without catarrh of the stomach, especially the severe ones known by the name of cholera infantum, will frequently appear in New York about the middle or end of June, will reach their highest number in July and August, will diminish in September, and disappear in October. A few only, protracted and tedious cases of follicular ulcerations of the colon, will remain until November or December. In southern climates, infantile cholera will appear sooner; it will be observed in the beginning of June, and last to October, in Pennsylvania, Ohio, Maryland, Kentucky, and Virginia; and is observed, from April to November, in South Carolina, Florida, Alabama, Louisiana, and Mississippi. It is also well known to every practitioner, and to every careful observer, that every cool day interrupting a series of warm days, will diminish the number of cases, as every increase in temperature, combined moreover with moisture in the atmosphere, will rapidly increase it. Epidemics of infantile cholera are observed, according to Hexamer, as soon as the average temperature of the month has reached sixty-nine degrees; it is on its height at from seventy-one to seventy-eight, and disappears when the temperature falls below sixty-five. In 1816, when July averaged sixty-one, and the three summer months but sixty-eight degrees, there was but one fatal case of infantile cholera in the city of New York.

The very age of children appears to predispose them to diarrhœa. Prematurely born children are known to suffer much from it, but they are generally liable to a great many disorders. Mature children will suffer the more the younger they are, the first week of their life not excepted. The frightful cases described by Ricordeau, by the name of enteritis choleriformis, with their vomiting, greenish serous diarrhœa, high fever, cool skin, senile expression, retention of urine, and partial cyanosis, and known to us as bad forms of common infantile cholera, have been proved to be particularly fatal in this early age. The first month of life is, according to all the statistics, that in which diarrhœa occurs most frequently, and proves most fatal, both the frequency and fatality decreasing from month to month; nevertheless, these are the months in which, what is generally called dentition, does not take place. The well-developed cases of severe gastro-intestinal catarrh (infantile cholera) are more frequent in the second and third half year, but according to my observation, just as many occur before the first year as after. Thus, neither the "eye-teeth" nor the "second summer" are to be blamed so much, after all. But there is some truth in the blame thrown on the second summer. A child born in the course of winter or spring, is from fourteen to twenty months old in his second summer; he is probably weaned, and then liable to gastric and intestinal disorders depending on being fed, over fed, and badly fed; or he is kept at the breast by the too careful mother, who is fearful of some imaginary constitutional disturbance. The infant, consequently, is forced all summer, to take improper food, the nutriment of a nursling inappropriate for the digestive organs of a boy with from twelve to sixteen teeth in his mouth. After two years, the tendency to diarrhœa is decreasing, particularly the number of fatal cases of cholera infantum. Of 1525 cases of cholera infantum proving fatal in New York, in the year 1854, but 154 were over two years of age.

Many severe diseases of a more general character are liable to become complicated with diarrhœa. Typhoid fever and tuberculosis belong to this class; the increased secretion of the intestines and the enlarged number of evacuations depend on the number and size of the local ulcerations of the peculiar well known character. Umbilical phlebitis, and peritonitis, have sometimes diarrhœa as an accompanying symptom, from obstructions taking place in the circulation of the adjacent organs; for œdematous swelling and transudation is a very common symptom of adjoining inflammation, a process the illustration of which is also well given by puerperal peritonitis. In acute exanthems diarrhœa is not a very rare occurrence. Thus it is one of the most severe complications occurring in the course of scarlatina. In infantile syphilis it is also a severe symptom, showing that the local ulcerations of the mouth or anus have influenced the mucous membrane of the intestinal tract by either sympathy or contiguity. And in rachitis, diarrhœa is not only frequent, but sometimes very obstinate. Rachitis is not so much an original blood disease, but more probably it owes its general character to the influence exercised by the allotted functions of the digestive organs. Although the well known affections of the osseous system are its prominent symptoms, in its fully developed course, one of its usual and early characteristics is, for instance, enlargement of the liver. Every cause of obstruction in the course of circulation of the portal vein, thereby accumulating a superabundance of blood in the small venous vessels of the intestinal canal, has the effect of producing transudation in the canal—diarrhœa. We thus approach at once another class of the general causes of diarrhœa, that of obstructions in the circulation of the portal vein, which, although more frequent in adults, is not unfrequently met with in infantile age. Interstitial inflammation, or cirrhosis of the liver, is mostly seen in adults, with its sequelæ of transudation from the ramifications of the portal vein; but it is an occasional occurrence in children also. And enlargement of the liver, with its consequences bearing upon circulation and digestion, is not so uncommon in early life that we ought to overlook it as one at least of the possible causes of diarrhœa. At all events, in no other manner can the diarrhœa of rachitical children find a readier explanation.

From your general knowledge of physiology and pathology you know that every repulsion of blood into or retention in the system of the vena cava inferior increases the size of the liver, and produces all the symptoms thereof. You know that a number of diseases of the heart and lungs, or the large arteries, have among their prominent symptoms enlargement of that organ. The liver is moreover, being of a glandular structure, and provided with immense nets of capillary vessels, so capable of instantaneous swelling, that like a sponge it keeps in its cavities any amount of blood not needed or not allowed in other organs. That chronic, and even acute diseases of the heart or lungs will instantaneously produce hyperæmia and swelling of the liver, is well known. Thus I have seen in endocarditis with incompetency of the mitral valve, not only catarrh of the lungs, but hyperæmic enlargement of the liver, icterus from the swelling of the mucous membrane of the biliary ducts, and severe diarrhœa from the hyperæmic state of the intestinal ramifications of the portal vein not allowed to freely circulate its contents in the engorged condition of the organ. And thus we learn at once the important nature of a symptom which has often set at naught all the skill and knowledge of physicians. I speak of the diarrhœa not unfrequently attending the course of a severe pneumonia in the infantile lung.

From the general nature of mucous membranes which we shall yet have to examine a little more thoroughly, you know that they are liable to be affected contemporaneously in distant parts or organs. The cause of this fact I shall here seek in the sympathetic connexion between distant parts of the same tissue, and in the equality of the cause producing such an affection. Thus it is a very common occurrence to find in the same individual, from the influence of a sudden change of temperature, both a bronchial and intestinal catarrh, or broncho-pneumonia, as generally observed in infantile age, and the same catarrhal process in the intestines. In such a case these two affections are but the co-ordinate symptoms of the same cause, and certainly the prognosis of the one is impaired by the very presence of the other. But this is not the worst case. Sometimes in the course of a severe broncho-pneumonia, and usually in its second stage, intense diarrhœa will set in. This is to be explained in this manner. The previous bronchitis has been very general, and at the very same time a large number of lobuli have been affected, perhaps even bilaterally. Hepatization takes place, not of the same character as in the inflamed lungs of adults, it is true, but to the same extent; the nature of the affection being satisfactorily proven by the large circumference of the dull percussion sound and the extent of bronchial respiration. There is no more free circulation of the blood in the lungs, it is accumulated in the system of the inferior cava, and produces enlargement of the liver; it is retained in the portal vein and its territory, producing intumescence of the intestinal mucous membrane, and transudation—diarrhœa. The relation, therefore, of this secondary diarrhœa to pneumonia is this: firstly, that it shows the affection to be very severe and widely-spread, and secondly, that it impairs the prognosis by abstracting from the body a large amount of albuminous and other necessary elements. This complication of diarrhœa with pneumonia has always been known as an unfavorable symptom; there being no means of removing the secondary symptom with the danger attending it before relieving the liver from the large amount of blood forced upon it, that is, before removing the infiltration into the pulmonary tissue. After all, the hyperæmia of the intestinal mucous membrane following the obstruction in the lungs, according to the ingenious remark of a modern writer, takes the place of cyanosis on the external skin.

Peripheric obstruction to circulation is of a similar influence on the secretion of the mucous membrane of the intestinal canal. Combustion of a large proportion of the surface of the body is always followed by diarrhœa; and the sudden contraction of the blood-vessels by the influence of a sudden change of temperature, is too well known to need any further comment. If I, nevertheless, allude to these causes of diarrhœa (as above I ought to have pointed to the internal and local irritation produced by helminthes and muguet, to the crowded population and unclean condition of foundling hospitals and poor quarters, etc.), it is for this reason that I wanted to present to your mind in as narrow a frame as possible, all, or nearly all, the causes of diarrhœa. I did not care for illustrating the symptoms of its several forms, as they will form part of another course of instruction; and as there is no form, neither mild nor severe, that you will not hear attributed to dentition; nor did I speak of treatment, as there is no treatment of diarrhœa that is anywhere or anyhow connected with dentition.

That mental excitement, fright, and anxiety, are in many instances the direct cause of diarrhœa in children and infants, showing their effect not only in increased secretion, but also in paralysis of the sphincter, cannot be denied, except by those who think too little of the development of the mental faculties in early age. That they have the same effect in adults is well known; and by direct physiological experiments, the connexion between the action of nerves, and diarrhœa has been placed beyond any doubt, since Budge gave rise to incessant diarrhœa by extirpating the ganglion cœliacum.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. VI.

In the treatment of *diseases of the respiratory organs*, mineral waters have been extensively used for so long a period as to have placed their value as curative agents in certain states beyond a peradventure, and demonstrated the extreme risk which accompanies their administration in others, especially if prescribed in undue quantities. In preceding pages I have noticed the intimate connexion between affections of the respiratory mucous membrane and skin disease: chronic catarrhs, so connected, form almost a distinct class. I have given two examples of summer catarrh, alternating with winter impetigo, observed by myself; in forty-five cases of follicular pharyngitis recorded by M. Gueneau de Mussy in his work already mentioned, there were but four in which the individuals had not previously suffered from cutaneous affections; and of these four, two had been the subjects of chronic conjunctivitis. Chronic bronchitis, and laryngo-tracheitis, are also frequent heir-looms of the exanthemata. Behind the chronic disease, or simply impaired function of the skin which preceded the affection of the respiratory mucous membrane, will be found most commonly the scrofulous diathesis; in all cases faulty digestion. It is these primary derangements which are so much under the control of mineral waters; often solely curable by their use. But here again we are met by the difficulty of estimating the value, respectively, of the hygienic influences, the balneo-therapeutic or external treatment, and the hydromineral or internal. The first may be left out of view, as the aid of few mineral water stations could be expected under any circumstances to effect unaided more than a slight and temporary improvement, though in some cases and at some springs, a really valuable adjunct to treatment. On the other hand, everything may be expected from the external use of mineral waters where a stimulant revulsive action on the skin is at very first sight plainly indicated. The mere restoration of suspended functional activity to so important an organ, may suffice to remove some chronic ailments which have arisen from its arrest. The sulphurous waters have been most extensively employed for this purpose, very often with success; yet bearing in mind the observation of Shönlein, already quoted, if a scrofulous diathesis be present, either common-salt or chalybeate common-salt waters should be administered in moderate doses long continued, after the conclusion of the course of baths, or in larger doses simultaneously; or what is preferable where practicable, a sulphurous common-salt water, like the Louisville artesian, may be employed both externally and internally, though in very small doses in the latter mode, and generally diluted with milk or whey. Those sulphur waters, which have the greatest reputation in the diseases under consideration, are calcareous, and remarkable for their feeble mineralization, the richest containing scarcely five grains in a pint, and sulphate of lime being in some the most notable ingredient. Chomel considers those which abound in carbonate of lime, which are more common in France than elsewhere, specific in chronic granular pharyngitis. I have no personal experience of their effects, but do not forget that common-salt waters, which have proved successful in my hands, are also many of them rich in carbonate of lime. The drinking water in some parts of Ohio, Kentucky, and other Western States, is almost as much surcharged with this earthy salt as the mineral waters in question, and it would be both interesting and important to know how far the habitual use of it has any prophylactic effect against granular pharyngitis. Perhaps, after all, it acts simply as a corrective of the acidity engendered during an enfeebled digestion, while other ingredients exert a permanently tonic influence. The importance of the action of the sulphurous waters in restoring appetite and digestive power when complicating serious catarrhal affections, was insisted upon by Bordeu; and something of the very remarkable cures effected by those of Ems must be attributed to their power of relieving serious derangements of the digestive apparatus, especially engorgements in any part of the portal circle, with less excitement and disturbance, less critical change than the more powerful and mostly inapplicable Carlsbad or Vichy, whose composition—alkaline simply and alkaline glauber-salt—analogous to that of Ems, would seem to indicate their use in the same class of cases. But the rule laid down with regard to the thermal treatment of skin diseases is quite imperative when prescribing for those of the respiratory apparatus, namely, that though a certain amount of stimulation may be advisable, or even necessary, it must be restrained within very moderate bounds, and not even revulsive treatment allowed to exceed them. The sulphurous waters, but preferably the alkaline common salt, are of great service if uterine affections have preceded or complicate the pulmonary. Humoral asthma is one of the commonest of these associations. More than five years ago, I treated a lady who had suffered for twelve years from increasing humoral asthma, which had not merely become continual, but the exacerbations of which occurring at the "turn of life" threatened to prove fatal. As there was marked abdominal plethora and enfeebled digestion with impoverished blood, I commenced with a sufficiently free use of the Rakoczy to amend this condition, and then prescribed a course of Ems. In two months this lady was well, and though taking cold sometimes produces a slight relapse, scarcely enough to be dignified with the name, the unaided powers of nature restore her to health on each occasion. It is, however, only the catarrhal element of asthma over which mineral waters exert any favorable influence; though if there be asthmas whose pathological base is to be sought in the gouty or rheumatic diathesis, as some contend, and as I think quite probable, although I have never traced any such connexion, perhaps from simple negligence, then we may confidently expect to derive benefit from the hydro-mineral treatment already indicated in treating of those diatheses; and the same general principles will govern our prescriptions, if any pathological connexion with skin disease, or a predisposing scrofula, can be detected.

Against tubercle as syphilis mineral waters are wholly powerless; improperly prescribed or used excessively they accelerate its destructive march. Nor do I see what else could be expected; for either they excite the morbid action which in the tubercular diathesis tends to further deposit not to resolution, or in later stages increase the rapidity of the colliquative changes to a rate which must necessarily soon prove fatal. Prescribed, however, with care and discrimination, there is no doubt of the benefit which may be derived from their power of palliating symptoms, like other articles of the materia medica. I have been in the habit of prescribing them mainly on general principles, as do most practitioners of the English and American schools. Thus, whatever water we may think from its composition suited to the case, the nature and relations of the organ affected admonish us to prescribe but small quantities to be taken at once, lest the sudden addition to the mass of the circulating fluid produce too great a disturbance in the action of the heart, and congestion of the lungs, eventuating in hemorrhage, or a serious increase of bronchial secretion. Again, its temperature must be neither too high lest it stimulate, nor too low lest it depress. The addition of an equal portion of warm whey or milk so as to make the mixture tepid, while it obviates any dangers arising from heat or cold, at the same time retards absorption very considerably, and thereby removes the remaining source of anxiety.

At no period of development, not even when phthisis is merely threatened, should we place reliance on mineral waters alone, any more than on cod-liver oil, or any other medicine, alone. Five years ago a German merchant of Cincinnati, inheriting the tendency, seemed threatened with an immediate development of tubercular consumption. He was advised to remove to an elevated situation in the country, and in addition to a nourishing but mild and stimulating diet, to take twelve ounces of Seltzer water with milk, daily, for several months at a time. He secured a very desirable locality about six miles from his place of business, riding to and fro daily in a buggy. At the end of three years all trace of tubercular diathesis seemed to be eradicated, and he remains well; but with my present experience to corroborate the evidence and opinions of such men as Hufeland, I could not bring myself to believe that similar benefit would have followed the removal to the country unassisted by the use of the Seltzer water, containing in the pint seventeen grains of chloride of sodium, six of carbonate of soda, besides smaller amounts of phosphate of soda and the carbonates of lime, magnesia, iron, &c, though I very willingly allow that a judicious employment of many other tonic and alterative remedies might have brought about the same result. The alkalies and alkaline salts have long been used alone or combined with various tonics, especially in the scrofulous forms of phthisis, "with temporary and sometimes permanent benefit." Chalybeates have been obviously indicated, but have been found to require extreme caution in their exhibition lest they should induce hæmoptysis, or exercise an unfavorable influence on the "cough, expectoration, breathing, pulse, and the accompanying hectic." Sulphur too has been employed in its day, as extensively as most other remedies of repute, though now somewhat out of date. Thus we see the very substances which, as medicinally characteristic, give distinctive appellations to the three classes of mineral waters almost exclusively employed in consumptive cases, have just claims on our attention on their own account. The alkaline common-salt, the chalybeate and the sulphurous waters afford us ample variety and combination, and the best possible forms in which to employ them. Thus, where the simply alkaline Vichy would prove too strong, as would almost always be the case, we have the mild Ems, already mentioned, where the carbonate of soda is combined with the carbonates of lime, magnesia, iron, and manganese, strontia, and baryta, a fair proportion of common salt, and small amounts of the sulphates of potassa and soda, and the phosphate of alumina, forming an efficient alterative and resolvent, with fair claims to be called "chemical food." Its composition may be considered as affording a normal formula with which to compare others when the question of choice arises.

In attempting to arrive at definite ideas with regard to the value of mineral waters in developed tubercular phthisis, we are at once met by a chaos of contradictory evidence out of which it is no easy matter to elicit the truth, if I may be so presumptuous as to call the following —my own convictions merely—the truth; but it is not to be supposed that men like Hufeland or Copland, already quoted with or without acknowledgment by name, can be entirely mistaken, when, after an experience far exceeding in value that of most observers, they deliberately record in print their convictions of the value of hydro-mineral treatment in consumption.

In the first place the treatment is apt to be too active, especially at the springs themselves. Seeing the admirable effects of these in catarrhal affections, where there is no suspicion of tubercles, and the constitution remains vigorous, they are commonly prescribed in a routine manner, including baths, which are rarely advisable for the phthisical. (*En passant*, the danger of suddenly increasing the mass of the circulating fluid by endosmosis, while in the bath, is just as great as that already alluded to, of drinking too large a quantity at once.) We have always to fear that the stimulation which is absolutely necessary to the rapid cure of the chronic inflammations of the respiratory mucous membrane, shall in the phthisical render more active the very process which eventuates in the deposit of tubercle. This deposit again becomes a new source of irritation, reproducing local pneumonias, bronchial inflammation, etc., and thus our treatment does more harm than good.

In the second place, a sufficient regard has not been had to the varieties of the disease itself, and the astounding tenacity of life which characterizes some individuals afflicted with it, and who are supposed to be benefited solely by the waters, when their good constitutions should receive a share of the praise.

In the third place, the acknowledged benign influence of change of air and scene is so mixed up with the good effects attributed commonly to the waters alone, as to render an accurate judgment in many cases impossible, without further experiment on a sufficiently extended scale. The solitary spring of Weissembourg, Canton Berne, in Switzerland, enjoys a considerable reputation for its effects in dissipating congestions, and relieving the catarrhal complications of phthisis; and we can well understand the exaggerated opinion of his improvement, which the hopeful consumptive is likely to entertain. Now the water of Weissembourg is very feebly mineralized, containing in all about twelve grains of salts to the pint, of which sulphate of lime constitutes three-fifths, and no sulphuret or sulphuretted hydrogen; but then it is situated in the mountains, at an elevation of considerably more than three thousand feet. Compare the following observation from Copland:—"Dr. Archibald Smith states, that the several dark races, and the crosses between these races, on the coast of Peru especially, when attacked by the hæmoptysic form of phthisis, were most benefited by a residence for several months in the mountains, at an elevation of five thousand to ten thousand feet above the level of the sea." The simple increased exercise of the respiratory muscles rendered necessary to breathe with sufficient freedom in the rarefied atmosphere of such elevations, must tend to dissipate congestions, develop the functional activity of the healthy portions of lung, so as to compensate for the loss of the tuberculized, and invigorate the whole system in a manner likely to exercise a highly favorable influence in arresting for a time the progress of the disease.

In the fourth place, I am satisfied that the value of the sulphurous element in mineral spring waters is enormously overrated; and that it is to the other ingredients, the common salt, the carbonates and sulphates of soda and lime, and the iron, that we must look for an understanding of action and a guide in prescribing. A certain amount of sulphuretted hydrogen may occasionally prove useful in controlling the too stimulating action of the other ingredients; for it is a most powerful sedative; but it increases the sensibility of the skin to atmospheric changes, and its use, long continued, produces a depraved condition of blood—a peculiar cachexia—anything but beneficial in phthisis, threatened or developed. The chloride of sodium, on the other hand, besides its tonic property, possesses that of stimulating the mucous membranes; alkalies increase and thin the secretions; the sulphates occasion increased secretion from the intestinal membrane, are to a certain extent sedative, and prevent the too irritative action of the common salt and other chlorides, as well as the iron; while this latter counteracts the too colliquative tendencies of the alkalies, which, like the sulphates, are antiplastic; a property which renders some mineral waters of great value in relieving the debility and anæmia remaining after acute pleurisy, or rather after its active depletory treatment. Iron may be given in such combinations without fear of rekindling inflammatory action.

Whatever the stage of the disease when tubercular phthisis is evident, general principles governing the employment of mineral waters, as of any other medicine, *all* the circumstances must be taken into due consideration, as if one were about to prescribe singly or combined, expectorants, sedatives, laxatives, tonics, what not; and it is only necessary to remind the reader of the law already laid down in these papers, namely, to commence their use during the intervals of attack, or periods of least activity, as *imperative in phthisis;* begin also, in all cases, with a minimum dose; a wineglass or a tablespoonful. In most cases, it is better to add whey or milk tothe common salt, and even the glauber-salt waters. Be on the constant watch for hemorrhage, and on its occurrence suspend their employment for some time. Their use, alternately with cod-liver oil or other remedies, is much to be recommended. All waters, rich in carbonic acid gas, favor expectoration, make it thinner, and gradually diminish the quantity.

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WOUND OF THE BRAIN.—SECTION OF LONGITUDINAL SINUS.—RECOVERY.

By GEO. B. WILLSON, M.D.,

PORT HURON, MICH.

On June 4th, 1859, I was called to see W. S., cabinet maker, aged twenty-two, wounded in the head by a circular saw. Found him in the shop where the accident occurred, sitting up without assistance. He was coughing frequently, and on my lifting a cloth thrown loosely over his head the blood at each expulsive effort of the cough spurted out from a saw-cut gash, some seven inches in length, extending across the front part of the head. He was a light-haired, blue-eyed person, of nervo-sanguine temperament, and light build. His surface was pale and cool, inclining to clamminess, pulse slow and weak. He was quite rational, but talking and breathing were much interfered with by his frequent dry hollow cough. I asked him if the cough had troubled him before the accident, and being answered in the negative, I dealt out about half a grain of acetate of morphine, and laid the powder on his tongue, directing him to swallow it as well as he could, there being no other way at hand for administering it.

On first coming into the shop, I had despatched a messenger for a buggy to convey him home, and now, after wrapping him in overcoats and such other parts of clothing as were at hand, while waiting for the buggy, I set about investigating the extent and cause of the wound. I had scarcely proposed a question, however, ere I observed that the cough had very much abated, and in a minute or two more it entirely ceased. It could not have been more than five minutes from the time I gave him the powder until the complete cessation of the cough, so that I am yet undecided as to whether the relief was owing to the medicine or not.

I now learned that the patient had gone under a small rapidly revolving circular saw, and on suddenly raising his head brought it in contact with the teeth of the instrument, and on the instant had its edge buried in his brain. The whole affair was but the work of a moment. He had fallen at first, but immediately recovered himself and retained the use of all his faculties unimpaired. The wound corresponded in width with the set of the saw—a little over a quarter inch; in length it was slightly over seven inches, and extended from the superior temporal ridge of the left parietal bone, across the middle of the sagittal suture to within about an inch of the anterior tip of the right ear. The saw was only about fifteen inches in diameter, and, as the convexity of it cut downwards into the brain, it must have severed the superior longitudinal sinus completely across, besides tearing through several branches of the meningeal artery of the right side.

The bleeding must have been profuse at first, for there were clots of blood on his neck, and in the folds of his shirt between his neck and shoulder of the side on which the wound was chiefly situated—the right side. It could not have lasted long, however, for I saw him in less than ten minutes after the accident, and all the bleeding then observable was the spurting and jetting out of the blood from the wound when he coughed. While the coughing continued, at each inspiration the cerebrum shrank down from the skull admitting the air under the dura mater, and then with each expulsive effort the air and blood bubbled out together, the blood being thrown to a distance of several inches.

After the buggy arrived, he was able to help himself into it, and sat up till he was conveyed home, some ninety or one hundred rods. By that time, my colleague, Dr. Stockwell, had arrived, and soon after some other physicians. We cleansed the wound externally, and then, with a *grooved director*, we endeavored to scrape out the sawdust of the skull from the interior of the wound. The director was slipped in, gouge-like, at one extremity of the wound, and passed through the wound several times, carrying out with it considerable numbers of little crumbs of the sawed bone which were buried down into the cerebral substance. It was impossible to be certain of having got away all the foreign particles, but I endeavored to scrape the bottom and edges of the wound pretty thoroughly. The external opening was then dressed, by laying into it a long narrow strip of chamois skin, and leaving a small opening at its most dependent extremity. It was then covered with adhesive plaster and the patient put into a comfortable bed without much warmth, the coolness and tendency to clamminess of the surface having entirely passed away. The prognosis given by all present was unfavorable; and not knowing any treatment that would help him more than what was already done, I merely ordered him the half of a seidlitz powder, and directing him to lie on the right side, he was left till morning.

He was closely watched for the first few days, but as everything went on favorably, no medicines were administered. The wound was dressed at intervals of from one to four days, by myself and Dr. Stockwell, for six weeks; at the end of which time it was completely closed, and he felt quite well, not having had a single untoward symptom during the whole course—not even a slight temporary fever or pain. For some time before he was discharged he was directed to exercise himself in stooping by bending slightly forward and remaining so for a short time before straightening up again, and gradually increasing his stooping from day to day, he improved until he could stoop over as far as he ever did without pain or inconvenience.

His health after resuming his former duties was not so robust as before, but he had no sickness, and when I last heard from him he was feeling in every way quite well.

This is one of the cases which is best treated by not doing too much, and which prompts us to ask—*Who will not get well if he be only let alone?*

Reports of Hospitals.

ST. VINCENT'S HOSPITAL.

SERVICE OF DR. FINNELL.

Strangulated Inguinal Hernia.

[Reported by J. J. Conolly, M.D., Assistant Surgeon and Physician.]

Emile Berthelot, æt. 40, native of France, married, entered St. Vincent's Hospital, March 21, 1861, with Strangulated Inguinal Hernia of the right side. His history was as follows:—From the age of eighteen up to the present he had been afflicted with an irreducible hernia consisting of omentum, which had become firmly adherent to the sac. During all this time he wore a truss for the purpose of preventing protrusion of the mass. On Saturday, March 16th, his truss got broken and he consequently laid it aside. The day following, symptoms of strangulation began to manifest themselves for the first time in twenty-two years. He then applied to his physician, who directed him to procure a new truss. The instrument was adjusted without the hernia having been reduced. On Monday the symptoms of strangulation were still more marked. The vomiting was now incessant, the pains in the abdomen very severe, and the hernial tumor hard and painful. During Tuesday and Wednesday he gradually grew worse—truss still applied. His friends were now anxious to place him in the hospital, and accordingly on Thursday he entered the institution, being able to ride in a stage from his own house to the hospital, a distance of about two miles, and ascend a long flight of stairs leading to his ward without any assistance.

His pulse, at the time of admission, was 120 per minute, soft and feeble; skin cold and clammy, and bathed in perspiration; he was cheerful in mind, and did not appear to realize his true condition. A consultation being held, it was decided to operate at once: the taxis having been previously faithfully applied while the patient was under the full influence of ether. An incision four to five inches in length was made over the tumor, the dissection being continued until the sac was opened, when a large mass of omentum presented itself to view. A careful examination of the parts revealed a small knuckle of intestine constricted at the *internal ring*, of a dark chocolate appearance, with a slough upon its mesenteric border about the size of a twenty-five cent piece. This had a cribriform appearance, and gave exit to a considerable quantity of fluid fæcal matter. The stricture was now divided, and the intestine returned, except the point where the lesion had occurred. This was stitched to the edge of the external wound with a view to the formation of an artificial anus; the indurated mass of omentum was removed, three interrupted silver sutures applied and the wound dressed with lint, dipped in warm water.

Symptoms of collapse now appeared, and the patient rapidly sank and died two hours after the operation, and six hours after his admission into the hospital.

Autopsy.—After death the portion of intestine involved, measuring about twelve inches, was removed, and presented a dark chocolate appearance.

The points of interest connected with this case are, that this man had actually worn a truss by the direction of a physician, for two days pressing against a mass of strangulated intestine. It is also worthy of remark, that he was able to ride from his residence to the hospital in an omnibus, and afterwards walk to his ward with comparative ease, the intestine being at this time in a gangrenous condition, and death taking place six hours after.

American Medical Times.

SATURDAY, SEPTEMBER 14, 1861.

THE MEDICAL SESSION.

The reopening of our medical societies and the commencement of our medical schools inaugurate the medical session of the year. The first in the field is the Pathological Society, which resumed its meetings on Wednesday last, under the presidency of Prof. Post. This society is more generally attended by the profession of the city than any other, as its sessions are occupied entirely with the most interesting and instructive scientific discussions. Every one who wishes to improve an evening in the study of pathological and microscopical anatomy, never fails to be gratified on attending a meeting of this society. No time is wasted in the consideration of extraneous questions, as ethics, parliamentary rules, etc., but the entire evening is sedulously devoted to scientific matters. We may say, in passing, that this Society has not done its duty to the profession, nor has it rendered justice to itself. During the seventeen years of its existence, what has it done to advance pathology as a science by the formation of a museum, by elaborate investigations, or even by publication and illustration? With the exception of the benefits which individual members derive from the personal inspection of fresh morbid specimens, and the discussions in which they engage, and the few meagre reports of its proceedings, scattered through various medical periodicals, nothing remains to mark the usefulness, or the existence, of this excellent society. We speak the sentiments of the profession, both of the city and country, when we state that the Pathological Society owes it to its own reputation, as well as to the cause of pathological science, to engage in more thorough investigations, and to give to the medical public an annual volume of its proceedings. Its facilities for investigating doubtful questions in pathology are most ample. The materials for such researches are abundant, and among its members are the best microscopists, anatomists, and physiologists in the country. All that is required to accomplish the objects enumerated, is a proper direction and encouragement of the energies of those qualified to undertake the study of special subjects, and pecuniary liberality of the society as a body. We hope another year will not be allowed to pass without the issuing of a volume worthy of the society.

On Wednesday evening next, the Academy of Medicine resumes its regular bi-monthly meetings. All will welcome the return of the sessions of this Society, and of its numerous sections. Its meetings, always attractive to the profession from the variety of subjects introduced, have during the last two or three years been in the highest degree interesting, owing to the formal discussions of prevailing medical theories by the most eminent men of the profession. Such were the discussions "On the Anatomy and

Pathology of the Prostate Gland," by Van Buren, Mott, Parker, Post, and Wood; "On Puerperal Fever," by Professors Joseph M. Smith, Francis, Clark, and Barker; "On the Use of Pessaries," by Peaslee, Sims, Gardner, and Thomas; "On Morbus Coxarius," by Post, Wood, Watson, Buck, Sayre, and Bauer; and "On Diphtheria," so generally participated in by the members. These discussions have been widely copied, not only at home and abroad, but have been frequently referred to as authoritative on many practical points. This is the peculiar province of the Academy, and forms the most attractive feature of its scientific sessions. The contact of mind with mind, in open and extemporaneous debate, is not only calculated to elicit truths, but gives a peculiar zest to the individual subject and earnestness in its study to the participants. The same enthusiasm is communicated to the members at large; questions involved are re-examined in the interval, and at the close of a discussion extended through several meetings, the amount of information thus acquired by individuals is greatly increased. The investigation of special subjects by this means should specially interest the officers of the Academy. We cannot fail to notice the efforts made by President Anderson in this particular; much of the interest attached to the meetings during the last half-year, is due to his untiring exertions in bringing forward important subjects, and eliciting thereon the opinions of prominent members. We may notice here, that the approaching Winter Session of the Academy promises to be one of unusual interest. Several members have expressed their intention of introducing for discussion questions of great practical importance, among which we may notice, Pathology of Albuminuria, by Prof. Clark, on the Reproduction of Bone, by Prof. J. R. Wood, on Anæsthetics in Midwifery, by Prof. Barker. During the last year the Academy has contributed largely to our local medical literature by the publication of a Bulletin of its proceedings. The Sections have, with two, or at most three exceptions, been poorly sustained. The Surgical Section, under the energetic guidance of Prof. James R. Wood, has fairly rivalled the Academy in the attendance upon its meetings, and the thoroughness of its discussions. The subject of Exsection of Joints, and the collateral questions relating to their pathology and treatment, have been quite exhausted, and the facts and experience accumulated would make a respectable volume. Several able reports on surgical subjects have emanated from the same source. The Obstetrical Section, presided over by Dr. Underhill, and that on Materia Medica and Therapeutics, by Dr. P. Van Buren, have held regular meetings, and each has contributed its quota to the material interest of the parent Society. It is much to be regretted that the Sections are not all well sustained by the members, for it is through them that the Academy itself should receive constant support. We would urge the members of the delinquent Sections to attend their meetings and endeavor to make them not only active auxiliaries to the Academy, but efficient societies devoted to their especial branches of medical science.

Every one must rejoice, however he may have enjoyed the summer vacation, that the routine of every-day business is again to be diversified with the pleasant social and scientific gatherings of professional friends. And this is especially true of those practitioners to whom the summer has brought no relaxation from duty, but who have pursued their labors unremittingly during its stifling heats, in the relief of human suffering.

The first of the Medical Schools to commence its preliminary term is the New York Medical College, which opens on Monday, the 16th instant. Several important changes have occurred in its organization since its last session. The chair of Theory and Practice has been vacated by the death of Prof. Reese, and those of Chemistry and Anatomy by the resignations of Professors Doremus and Bronson, respectively. Meantime the following accessions to the faculty have been announced, viz. Prof. Noeggerath to the chair of Midwifery, and Prof. Holcomb to the new chair of Ophthalmic Science.

The new school at Bellevue, the Bellevue Hospital Medical College, enters the lists on the Wednesday following, the 18th inst. The faculty of this institution embraces the names of medical teachers widely known and highly appreciated. The opportunities for clinical instruction, a prominent feature in the curriculum of this school, can scarcely be excelled. A commodious building has been erected on the hospital grounds for collegiate puposes, with ample lecture and dissecting rooms. The College of Physicians and Surgeons commences a preliminary course on the 20th inst. No changes appear in the faculty of this school. In the University Medical College, the Autumn Course of Lectures is in progress. The faculty remains unchanged.

What will be the comparative attendance of students during the approaching sessions of our schools, is a matter of earnest and anxious inquiry among the medical professors with whom our city now abounds. Time alone can answer this query.

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THE WEEK.

The American Dental Convention has exhibited commendable courage in holding its regular annual session, notwithstanding the "distracted state of the country." This, we believe, is the only National Scientific Association which has held its annual meeting during the present year. The American Medical Association, the Pharmaceutical Association, and the Association for the Advancement of Science, adjourned their meetings at the commencement of our political troubles. The necessity and wisdom of the suspension of these meetings may well be questioned. Certain it is that the Dentists seem to have had a full convention, and their proceedings are marked by unusual spirit. The session was held at New Haven on the 6th of August, the President, T. L. Buckingham, in the Chair. Besides the strictly scientific subjects discussed, professional etiquette among dentists, and between them and physicians, received considerable attention. The opinions expressed are in the highest degree honorable to the members of the dental profession. Prof. Hooker responded on the part of the medical profession, cordially reciprocating the fraternal sentiments of his brethren. During the session, a communication was received from the College of Dentists, England, inviting the American Dentists to attend the proposed "World's Dental Convention" to be held in London during the great International Exhibition of 1862. The invitation was formally accepted.

Might not the medical profession act upon this hint, and hold at the same time and place, a World's Medical Convention?

At the approaching fall election in this city, one class of offices is to be filled in which the medical profession should have a sufficient interest to control the selection of candidates. We refer to that of Coroners. New York has four of these officials, and furnishes them almost constant employment. Every one who reflects a moment upon the nature of the duties of a coroner, as the officer who takes the first step to detect the criminal in all cases of violent death, will see that this office is the most important in its relations to criminal jurisprudence. We are yet to have a properly qualified person filling this position in our city. In general the lowest grade of political hucksters are allowed to monopolize these offices. A Coroner's Court in New York presents the most shallow farce ever enacted under legal form. The presiding genius seldom possesses sufficient knowledge of law or medicine to enable him to conduct, becomingly, the simplest official investigation. Indeed, it does not always happen that he can speak the English language intelligibly. Every respectable medical practitioner feels himself degraded by compulsory attendance upon these courts. It is high time that these offices were purged of these incompetent incumbents, and the remedy in great part rests with the medical profession. It should make a united effort to place competent members from its own ranks in these important positions.

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It will be remembered that a public meeting was held in this city during the past winter, for the purpose of enlisting ladies as co-operators in the work of sanitary reform. An elaborate report was presented by Dr. Elisha Harris, defining a branch of sanitary reform to which ladies are not only peculiarly adapted by habit and education, but the advancement of which must ultimately depend upon their labors. This was shown to be the instruction of the mothers in our laboring classes in the arts of domestic economy. Speeches were made by the Rev. Drs. Bellows and Muhlenburg, Hon. F. A. Conklin, James T. Brady, and others, heartily endorsing this movement, and strenuously urging its prosecution. We are not aware, however, that any organization was effected. We are reminded of this laudable effort in our city by reading the reports of the Sanitary Section of the "Social Science Congress," recently held at Dublin. In his opening address, the President, Lord Brougham, said:—

> "The diffusion of sanitary knowledge is a most important part of the duties of this department; and as the Association has from the first desired and accepted the co-operation of women, the Council have no hesitation in affiliating the Ladies' Sanitary Society, which acts under the highest patronage, and spreads amongst the poor a knowledge of the laws of health, it being now admitted that much of debility, disease, and premature mortality in this country results from ignorance and error, and might be prevented. The Society circulates many tracts upon the subject, has lectures delivered in the poorer districts of London, and engages in district visitings, besides instructing the parochial clergy in the work, and in many cases holding meetings in their vestries, where poor women are familiarly instructed on matters connected with health."

We have, from time to time, seen various notices of the successful operations of the Ladies' Sanitary Society of London, in their labors among the poor, and we are glad to learn from the above extract, that it was heartily endorsed at the meeting of the "Social Science Congress," with which it seems to have become incorporated.

We regret that the movement so auspiciously inaugurated in this city last winter, did not result in the permanent organization of a Ladies' Sanitary Association. We are by no means deficient in the material for an effective association of this kind. No city, indeed, can boast of more indefatigable and self-sacrificing female laborers in every department of benevolent effort, and in no city can there be greater need of that branch of social reform to which this foreign society is devoted. We hope that this subject, already so favorably presented to our ladies, may yet engage their attention, and call forth a united effort towards its accomplishment.

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At the recent meeting of the "Social Science Congress" held at Dublin, the following interesting statements were mode, contrasting the provision for vaccination existing in England and Ireland:

> "'Suggestions for the Prevention of Small-Pox.' The author commenced by stating that although all persons, rich and poor, had been offered vaccination gratis since 1850, at least 65,000 people had died of small-pox in Ireland within the last twenty years. There was no registration of births and deaths for Ireland, and consequently small-pox was allowed to pursue its fatal ravages unrestrained. The writer next adverted to the defective arrangements for vaccination in Ireland as contrasted with those existing in England. For the latter country £2000 was annually voted by Parliament to enable the London National Vaccine Establishment to supply the requisite lymph gratis to all who applied for it; whilst for Ireland, up to 1858, only £200 was annually voted, which sum was now increased to £400. Still every applicant for vaccine lymph in Ireland was obliged to pay for it. Dr. Phelan suggested that similar facilities should be extended to Ireland as those which existed in England."

Progress of Medical Science.

ABSTRACTS FROM RECENT MEDICAL PERIODICALS.

By E. H. JANES, M.D.

Eye-Drops.—William Oliver Chalk describes in the *Med. Times and Gazette*, an apparatus he has devised for dropping solutions into the eye. It consists of a capillary tube and bottle; the former made of a piece of barometer tubing, and so contrived as to serve the purpose of a ground glass stopper to the bottle, and a neck for the convenience of holding. The upper end of the tube above the neck is expanded into a cup-shaped head with a rim, over which is securely tied a thin piece of vulcanized india-rubber, forming an air-chamber; the lower ends shaped into a smoothly cut, tapering stem, rounded at its point, so as to avoid any injury to the eye whilst in use. The bottle contains a fluid ounce, and should be kept about three parts filled, so as to keep the stem partly immersed. By forcibly depressing the india-rubber covering with the point of the finger, the air is expelled through the solution, and as the pressure is withdrawn is replaced by the ascent of a portion of the fluid. When dropping the solution into the eye, care should be taken to make gentle and continuous pressure on the india-rubber cap, so as to avoid any access of air to the chamber, otherwise, as it becomes partly empty, an air-bubble is apt to form at the end of the tube, instead of a drop of solution. A very little practice will suffice to show the readiest means of appliance.

Induction of Premature Labor.—Dr. E. A. Kirby read a paper before the Royal Medical and Chirurgical Society, in which he gave the history of a case in which he had twice induced premature labor on a dwarf of singularly small stature and ill development. When first seen she was twenty-seven years of age, had been married twelve months, and completed her thirty weeks of uterine gestation. On examination, the spinal column and pelvis were found to be greatly distorted, and premature labor determined upon, the time chosen being the thirty-second week of gestation, but was delayed for a week owing to the patient suffering from bronchitis, and was only completed about the thirty-fourth. Induction of labor was commenced on January 30th, and she was delivered on February 7th. On rupture of the membranes, the elbow was found in the vagina, and the shoulder resting on the brim of the pelvis, the child lying transversely. Version was performed and the little patient delivered of a living child. In this case about two ounces and a quarter of ergot were employed with the most useful effect, and without occasioning the least bad symptoms to mother or child. A few months later she again became pregnant, but owing to the lateness of her application the child was lost. Her first child had by this time grown nearly as tall as herself. The author laid great stress on the superiority of this operation to craniotomy, in which one in five mothers dies, while in the induction of premature labor only one in fifty dies, and half the children are saved. The success, he thought, greatly depended on keeping the membranes entire until the os uteri was fully dilated.

Dr. Greenhalgh, having had considerable experience in connexion with deformity of the female pelvis, supported Dr. Kirby's opinion as to the value of ergot, as he had used it in five cases of premature labor with the best effects. He had never seen, and did not believe, that any injurious effects to the child were ever produced by the drug. In cases in which the child was born dead after the administration of large doses of ergot, it was reasonable to suppose that death was caused by the long and difficult labor, which had rendered the use of the ergot necessary for the accomplishment of delivery.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MAY 28, 1861.

DR. E. LEE JONES, CHAIRMAN PRO TEM.

ATALECTASIS.

DR. SEWALL presented a specimen consisting of the heart and lungs with trachea attached, removed from the body of a colored child, three and a half months old. The child had always been feeble from birth, was more or less oppressed in breathing, and not being able to take sufficient nourishment, was rendered very much constipated thereby. The patient continued in this state until three weeks before death, when it began to suffer from attacks of a paroxysmal and suffocative cough, which would continue for two or three hours at a time and gradually pass off. Domestic remedies were first resorted to, and afterwards a physician was called in who prescribed belladonna in small doses, but nothing proved available in checking the paroxysms, and the child finally died after one of them from exhaustion.

On *post mortem* examination, the two lower lobes of both lungs were found completely impervious to air, and the depending portions of the remaining lobes were similarly affected. The question started was, whether this child was laboring under atalectasis or pulmonic inflammation? There are some points, said Dr. S., that go to show that it was atalectasis. In the first place, there were no evidences of inflammation of the bronchial tubes. Secondly, the lung would have shown some evidences of pneumonia in the shape of hepatization, and there would have been some febrile excitement within the three weeks preceding the death of the child. The septa of the heart were perfect, and the organ itself was of the usual size and of healthy appearance.

ENCYSTED DISEASE OF CEREBELLUM.

DR. ENOS, of Brooklyn, exhibited a cerebellum taken from a man 45 years of age, and gave the following history of the case:—The patient was a book-keeper, whom I saw for the first time about five years ago. The first symptom that was complained of, was an inability to guide his right hand in writing, there being no actual paralysis or numbness. This difficulty so increased in the course of time, that he was unable to write at all, and was forced to give up his situation. Shortly after this, he began to lose the control of his right leg, and in his attempts to walk would act very much as if he were intoxicated. About this time also, he began to lose his vision to such an extent, that he was unable to read anything more than the headings of the newspaper. It was about this time in the patient's history that Dr. Clark saw him. Soon after, the patient began to complain of severe pain on the left side of the head behind the ear; he had been troubled with deafness for years, but it likely had no relation to anything that followed. The pain behind the ear disappeared on the application of counter-irritation. After keeping watch of the patient for two years, I lost sight of him for at least three years, when being called to see him I found him dead on my arrival. He had not changed his appearance very much, except that he was quite œdematous, and looked very much like a person who had had some disease of the kidney.

Autopsy.—On removing the cerebellum, where the disease was suspected to have originated, nearly the whole of its right side was found occupied with cysts. Towards the crus cerebelli, there was a hardened portion, and also some little of cheesy-like matter, having the appearance of tubercle. About two ounces of fluid were found in each ventricle, the cornua were obliterated, and a large portion of the white substance in the neighborhood seemed to have been absorbed. Towards the close of life, his intellectual faculties seemed rather to improve, as did also his power of walking. He had had but one convulsion about two or three hours before his death. I could not ascertain that the sexual appetite was at all influenced by the disease, but the power of co-ordination was very markedly interfered with. The whole case seems to substantiate the view of Flourens in relation to the function of the cerebellum. There was no disposition to turn in any one direction, but there was loss of power upon the diseased side.

DR. CLARK.—Some of the members will remember that I showed, a year and a half ago, a large cyst occupying a considerable portion of one of the lobes of the cerebellum. The patient, though she could walk about, and generally with considerable firmness, would every now and then become unsteady, and would have to seize something to prevent herself from falling. The unsteadiness seemed to be produced by an uncontrollable action of the muscles always of one side. She would roll out of bed always in one direction, and when the nurse placed that side of the bed against the wall, the accident did not recur. This was the patient that died during, or soon after the administration of ether. In the specimen presented by Dr. Markoe, some three or four years ago, in which there was disease of one of the lobes of the cerebellum, the "turning," which was quite a noticeable feature in the case, was always confined to the muscles of one side.

AN INTERESTING CASE OF INSIDIOUS SECONDARY PNEUMONIA.

DR. CLARK.—We are having now at Bellevue rather a small number of cases of fever, and I supposed two or three days ago that I might have had a specimen to illustrate the character of the affection. We had an autopsy; and it is to recite the instruction obtained from that autopsy that I now rise. The reason why I have nothing to show may be understood perhaps, if I remark that there was nothing that was demonstrable; and that very fact is the one which struck me as most remarkable in the case. I will give the history of the case in brief:—A woman, who had been night nurse in one of the wards of the hospital, became sick with chilliness. pain in the back and limbs, and headache, and febrile action, with some increase in the frequency of the pulse. In a few days her tongue became dry, and at the end of seven days there was a very copious eruption of "rose-colored lenticular spots," covering the whole body, very marked upon the chest and down as far as the abdomen. These disappeared on pressure with the finger, and reappeared as soon as they usually do when pressure was removed. This eruption faded away pretty much in the course of a week, and in the latter days of its continuance there were a few spots, particularly along the median line, that resembled petechiæ rather than the typhoid eruption, as they would not disappear on pressure, and were pretty large. But all these faded out. She was not very sick; there was some little disturbance of her mind, tongue remaining dry and ready to crack, no diarrhœa, no tympanitis, no pain in the epigastrium or in the right iliac region, or in any portion of the abdomen. Face pretty red, most of the time with a mahogany hue. She began to be better, the pulse falling in frequency, tongue sometimes being a little moist, but most of the time dry, and the treatment was almost remitted. And then, unexpectedly, she grew worse, why, I did not exactly see. It was not late enough for a relapse, and she gave no indication of any complication that was important. Her symptoms were, as nearly as I could find out, the same as in the beginning, excepting the chilliness; in other words, she was falling back in the typhoid state very markedly. She complained of no pain anywhere, and not the slightest cough was noticed by any one, except that the nurse said that during the whole illness of the patient she had the slightest possible abortive cough, but no expectoration. There was absolutely nothing to suggest to me the propriety of any physical examination of the chest, yet *this woman died of pneumonia;* as clear and distinct as could be, without one single symptom other than the physical signs that would lead to its detection. She was, perhaps, ten or twelve days at the time of her death from the beginning of what I supposed to be convalescence. I expected to find some lesions of a marked character of disease. I looked for the mesenteric glands, and found no evidences of disease whatever. We examined the whole portion of the intestine that is usually the seat of swelling and ulceration of Peyer's plates, and they were no more distinct than in a healthy person, with the exception of one or two high up in the intestine that could just be distinguished. Even the spleen, though a little large, had not undergone the typhoid or typhus lesion. The brain we were not permitted to examine.

The two points of interest with this woman were:—A distinct typhoid eruption, as well marked as I ever saw it in the wards of M. Louis, when studying its character under his guidance; and an entire absence of the usual intestinal lesion. In fact, there was evident nothing that usually goes with typhoid fever, unless perhaps a change in the blood, which a physician in a hospital can hardly find time to examine. The second point was this insidious pneumonia, which was really the fatal disease, creeping upon us without giving a single sign to lead to an examination. The pneumonia was passing into the third stage.

There are several other cases under treatment who have had some eruption, but none of whom have had diarrhœa. The question comes up, what kind of fever is this? To call it typhoid without the Peyerian lesion would be to violate the judgment and depart from the teachings of Mr. Louis; to call it typhus, with the rose-colored lenticular eruption, would be in the face of all the English and Irish instruction that we have received, and yet it does not run totally with either. It has not been very fatal; this is the only fatal case that we have had, and this was fatal by intercurrent pneumonia. There were seven cases in all, and three of these came from the same house.

Recent Inventions.

SURGEON'S REEL.

BY JOHN P. HODGEN, M.D.

The little apparatus described below was devised by myself, and I have found it a good substitute for at least one assistant in surgical operations requiring the use of ligatures. It consists of a hollow India-rubber ball (such as may be found in any toy shop), an inch and a quarter in diameter, with an opening made in one side an inch long (a simple slit). This ball has a band of elastic tape made with two loops—one to fit closely around the ball, passing at right angles across the centre of the opening; the second loop is intended to encircle the left wrist of the surgeon, and may be easily slipped over the hand. A ball of waxed ligature silk is placed in the ball of India-rubber, leaving an inch or two of the end hanging out of the opening. When a ligature is required it is always at hand, and can be used even more conveniently than one handed by an assistant.

St. Louis, Mo., *September 1st*, 1861.

Correspondence.

THE RENUNCIATION OF THE HOMŒOPATHISTS.

[To the Editor of the American Medical Times.]

Sir:—The remarks of your correspondent, "*Contraria Contrariis*," upon "the subject of recantations of Homœopathy," so far as they relate to the standing of the recanting party, seem to me especially fair, and by no means the dictates of an ungenerous mind. It is, indeed, very palpable, that the statement of the latter party, despite its appearing as an abjuration of error, is *suicidal to all pretensions to honesty, fairness, or scientific knowledge.* And, as his being a homœopathist had, before this statement, practically forfeited all his claim to scientific recognition, so he has now himself furnished the fullest possible justification of this forfeiture in the eyes of all just men, as well as to the medical world; for, as the practice he has been in is, so far as its formularies are concerned, a delusion or insincerity, so also it is most frequently an *imposture.* In common with *Contraria Contrariis*, I cannot see that fairness or truth requires us to look upon him with any regard negatory of the estimation in which the recanter, or his compeers, who have enriched themselves in this practice, were hitherto held. His confession furnishes no *indication* of his course. It is but the simplest justice to say, that it is a criminal confession.. In fact, since he freely confesses to a *moral* recognition of his error and wrong; nay is, despite that moral recognition that it is wrong, still ready to fall back on infinitesimal doses, the very doing which he confesses he saw, "was trifling with the lives of his friends and patients," no indication of his course and position is possible, only condemnation can be affirmed of it. It is precisely in this estimation that Hahnemann was held by his German contemporaries in the medical world.

With regard to Homœopathy itself, it would seem to the candid, that the recanter is no way qualified to assume an attitude—either of explanation or exposition—before the medical world, on the subject. That he should so present himself in this recantation is, while perfectly easy for the illiterate, *i.e.* uninstructed in science, amazing to those who have learned enough to *defer* their personal self-complacency or vanity to the limits of their knowledge. Contrary to his assumption, the medical world are not at all deficient in fulness of information or correctness of understanding on the subject, for this is precisely the difference between that world and himself—a difference which, we shall see, is by no means lessened by his present position—

for we shall observe that with a very questionable *faith*, he still recognises the dicta, not of homœopathy, now, however, as opposed to allopathy—the epithet by which he and his friends choose to designate the science of medicine—but as *a part of allopathy*, which he has done us the further service of defining with a Latin formula, in order to serve his purpose of "reconciliation." As to his formula, *contraria contrariis curantur*, the science of medicine denies it, as a correct designation, and *contrary* to his puerile and confused pretensions on the subject affirms, what is but a simple dictate of common logic, viz. that there can be no such thing in reality as a "fragment" or part of a law or science of medicine, different from that science. And if homœopathy is different from that science, and claims a separate and distinct existence (which it always most loudly has done), then it is certainly not at the same time *otherwise*, *i.e.* is not an integral "fragment" or part of a law or science of medicine, claiming no other but an inseparable participation in the same status, and therefore identified with it. Or, in other words, it is obvious to the infantile reason, that homœopathy cannot affirm its separate reality, constituting it distinct from a law, and at the same time, claim to identify itself as a "fragment" of that law or a participation in it.

Yet this is what our recanter does, and the egregious absurdity is enormously augmented when his "fragment" is itself, as it always has been called, a law—the homœopathic law—"similia similibus curantur." This is for our recanter, with the reason of the nursery, to *play* make-believe with the terms of the scholar, and to parade his achievement in the forum of science. To what jolly depths of intellectual as well as moral fatuity does following the *ablest* of our homœopathic enlighteners bring us—to what inimitable *confoundings of confusion* does it ask our listening ear and assenting voice! Yet again, if homœopathy (as he says) does not differ from the law or science of medicine, it being a "fragment" or part of that science (he says) which is precisely the same thing, then all its loud pretensions otherwise, which have formed its sole standing from the first of it, and been the source of much money to its believers, are simply declamatory or *verbal*, and fall to the ground, and are confessed to have been, on its own explicit claim of a separate, distinct, and triumphant status, an *unreality* from the very beginning. And this is precisely its case; to this conclusion the clearest insight can but conduct us, as it had already done to us years ago, when we were guided by an intimate and scholarly friend to its examination.*

To examine the pretensions of homœopathy is, at once, for whosoever brings a modicum of understanding to the encounter, to appreciate how utterly devoid of any veracity or validity the dicta of Hahnemann are.; and to study their history as teachings, is but to read how certain human faculties, when operated otherwise than in a definite relation to the facts and phenomena of nature—forming perception and making the mind knowledge—will revel in a muddle of unrealities over the vacancy they occupy in the mind's unfulfilled province. Hence, on the slightest examination of what calls itself homœopathy, it turns out to be a *simple deficit of reality or existence*, or void of significance *in reality*. As to the homœopathists, on the slightest exhibition of themselves, or of their purposes as attendants on the sick, you will always be struck with their prodigious deficiency in all the qualifications to deal with disease. They have not the slightest power to apprehend what is correct in therapeutics. And this is what renders so peculiarly valueless to the reader, professional or layman, the statement of the recanter concerning the agency of medicines, and his reasons—or what goes by that name with him—for his course and position. Hence one cannot but perceive that he has been moved to his confession not by a more correct appreciation of the true mode of dealing with disease, nor by any new experience or apprehension of truth, but simply by the desire to occupy a more *convenient* standing wherewith to advance his social and professional interests. Grant him sincerity, and on the merest glance at his relation, and the terms of his statements in which he expresses himself respecting homœopathy, and we find in them abundant illustration and proof of what I have above alleged respecting homœopathists in general, viz. the negation of all qualification to deal correctly either in theory or practice with the questions of disease, or in other words, of all real experience in apprehending the truth and purpose of therapeutics, and the function of medical science. Take for instance, so far as concerns himself, his statements respecting his experiences, and it becomes abundantly clear what the exact contents of the mind of a person who is under this deficiency of knowledge may be. How completely unreal and devoid of significance, in fact, or truth, will be his ideas—or what he calls by that name. He states, that under a "consciousness of self-degradation," and with the "sacrifice of common sense," and while "early convinced," that homœopathic materia medica was visionary and unreliable," and the formula of its theory of cure, viz. "Similia," &c., a "stumbling-block, and utterly opposed to reason," he yet proceeded to accredit it with the force and activity of reality. He also avers that, "though he had never been a convert to the use of infinitesimal doses," and that, "so repugnant to every fraction of common sense" were they, that he always felt that he was "doing something foolish and wrong in giving them," and in doing so for many years "he was trifling with the lives of his friends and patients;" yet, in addition, "he is still ready to fall back on infinitesimal doses if he *feels* obliged to."

All this abundantly vindicates our judgment of the incapacity we have alleged against homœopathists, and presents with abundant clearness, the muddle of mutually negatory fractions and elements of thought and feeling, which go to constitute their minds on the subject of medicine. Amazing as all this is, and incredible as it would be if we were not prepared by our philosophy of mind to understand it, yet the relator evinces no suspicion whatever of his own mental requiem, nor of that deficit in thought, which leaves him the perplexed subject of this hopeless circle of contradictions, and himself their sporting ground. No stronger affirmation is in fact possible, that he is still without that intellectual experience which qualifies the mind to discern the distinctions of truth and falsehood. Such a deficit invariably begets that discrepancy, or *conflict* between the different departments of a man's nature, from moment to moment, of which he is a most striking example.

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* The late Dr. J. S. C., the most brilliantly intuitive and perfectly candid man it has been our good fortune to know. He died by a suicidal act while insane. *The mention of his name will not, we trust, be unpleasant to the recanter.* An incident of his life perfectly confirms what our recanter himself says, in his confession, as to the influences brought to bear upon him by homœopathists to dissuade him from a renunciation of his faith in any power of curation belonging to the "system," and shows what a duplicity prevails among the practitioners of this system in order to preserve the appearance and dignity of one professional corps or body. Dr. C. was a favorite student of Dr. Gram, the earliest homœopathist in this country, and once associated with Hahnemann himself. Though early in his studies and practice a homœopathist, he had ceased to have any faith in its dicta, though he still retained one of its precepts, which he mistakenly believed to be peculiar to homœopathic views, without, however, publicly repudiating homœopathy, which he was not called to do, as he never sought any other standing or regard than what his own personal merits entitled him to. Hahnemann's rule of so-called cure he simply regarded as an imperfect guide to the selection of a remedy, and he used many of his remedies in common with homœopathists without giving infinitesimal or minute doses. When the article "Homœopathy," for a popular encyclopædia, came to be written, it was assigned to Dr. C., probably because he was one of the very few (three, or perhaps four) in this country who were capable, from a real understanding of what Hahnemann's homœopathy was, of giving a correct account of it, and with sufficient authorial ability to do so. Being a man of great candor, he, in his article, took exception to most of Hahnemann's dicta, and showed the complete absurdity of his "sora" theory."

He also disproved others of his views which were opposed to facts In short, the account was not homœopathic, but a perfectly candid account of Hahnemann's views by a writer whose insight into its claims could not be excelled, and whose intellectual resources and practical proficiency in its practice, under the tuition of one of its founders, *Dr. Gram*, made his judgment the fairest and fullest possible. Dr. C. died before his article entered the encyclopædia, and before its entrance the homœopathic physicians of this city, learning of its tenor and force, dissuaded the publishers from adopting it. A new *homœopathic* article for the work was written. From this friend, to whom I owe the strengthening of my earliest intention to enter upon the study of medicial science, I had learned more of the history and moral career of homœopathists and homœopathy than I would care to disclose. It is, however, well known that the chief, *i. e.* most notorious of this class—a man who has become very wealthy from the use and sale, in his own house, where he kept a shop for infinitesimal materia medica—was once expelled from a medical society for what was regarded as criminal conduct in the sale of diplomas, purporting to be from a college and faculty which had no existence *in se*.

Here, too, we come in view of the peculiar fact, that his convictions exist, under the same *privation* of the force of reality and truth, as his ideas or thoughts. Thus he was "convinced of the visionary nature of Homœopathic Materia," and yet in practice he relied upon what, in his "conviction," was "visionary and unreliable." Again: that he had "never been a convert to the use of infinitesimal doses," and yet he used the very things he had never been converted to the use of. Again: That he was "trifling with the lives of his friends and patients, to depend on them" (the doses), yet he gave them, and accordingly trifled with their lives, and is still ready to fall back upon the infinitesimal doses," and again "trifle with the lives of his friends and patients,"and to do again, by giving such doses, what is repugnant to every feeling of common sense, and thus still "be doing something foolish and wrong," by giving them to the end. What a capacity of moral subserviency does all this declare! Were it not that it is the confession of a homœopathist, we should scarcely credit it.

But not only is our recanter incapable of the discrimination between the real and unreal, he is equally unable to learn, from his own statements, what every other reader of them at once sees. He says that "he has never been convinced that they (Hahnemannic doses) have any efficacy whatever." Does he not see that medicine should have efficacy, and curative efficacy, in the *mode Hahnemann devised, constitutes the very definition and character of his system*, and that if they do not so act, that system does not really or practically exist. For the *system is* the curative efficacy and relation of the medicine; and if this efficacy and relation do not exist, it, *i. e.* the system, does not exist. Its formulæ are simply declamatory, and have no existence *in rerum natura.*

But the most instructive part of this history is, where he presents himself, as he believes, as having reconciled the chief dictate of Homœopathy, "similia" with "Contraria contrariis curantur"—the formula he adopts for medical science—and thus seems to himself to save Homœopathy from complete abandonment. This fallacy it is very important to recognise, as it vitiates much of the existing mode of what goes by the name of reason, and in reality presents itself under the empty mask of the latter.

It consists in the supposing that two propositions which differ, or are mutually contradictory, can be "reconciled," with the retention of their previous significance or value; but no greater logical error is possible in fact, and this is the case with the reconciliation in question.

Our recanter of course commences—as he *must*, if he would take the first step, by admitting the validity or truth of the formula he ascribes to Allopathy, viz. "*Contraria contrariis curantur.*" The bare statement of both propositions proves their difference; and how will he reconcile them, or make them accord? Has he done it?—Certainly not. Nothing could be more thoroughly precluded by the reason of the case. How then does he *affect* to do it, since, if he retains the significance and value of the Homœopathic dicta, "similia," he still holds to the difference and contradiction to its counter proposition, which constitutes its significance? In the nature of the case, therefore, it is impossible that he can still maintain this difference, and yet obliterate it, which he must do to accomplish the reconciliation. What then is this so-called reconciliation? Simply this—that all the pretensions of the homœopathic dicta to philosophic verity are vacated; they are, *in so far as they pronounce contrary to allopathy*, relinquished. The so-called reconciliation shows itself to be the mere absence or withdrawal of all the claims of homœopathy, contradictory to those of the system it pronounced itself opposed to.

This is all that in fact can be done in the case, and to call it a reconciliation is to confess one's inability to see the plainest of fallacies. Homœopathy, then, is "reconciled," by a step which vacates all its previously assumed and heralded pretensions. Then, to say that "similia," after it has vanished in the process of "reconciliation" to its opponent, is a fragment of the great law, "Differentia differentiis curantur," is of course nonsense; that is, what the reason does not recognise.

So too, to say that similarity means "a degree of difference," is to identify difference with "similarity," and to assign to Hahnemann's dicta "similia," a significance which obliterates its whole previous purport. Such a statement is a dictate of garrulous fatuity. The very phraseology of all this proves that in his new character our recanter presents no new experience of his faculties. The old *confusion* is renewed. As before he could not distinguish true medical science from Homœopathy, so now he still remains unseeing, that since there is but one system, and that *not* Homœopathy, that that system does not include anything that was proclaimed to be *distinctive* of Homœopathy. If, to grant him all logical length, he insists on his "reconciliation," then he is bound to this, viz. that since the two are reconciled or in concert, and there is no oppugnancy, then it has been an error hitherto to have proclaimed any discrepancy between the two, and an equal error to have adopted the theory of this difference by adopting Homœopathy. Of course I shall not object to whoever pleases or chooses, to reconcile Homœopathy with medical science—which they term Allopathy—but I shall not on my part, nor the medical world, either be likely to forget that it *is precisely on the contrary judgment* that Dr. P. has been acting for many years—i. e. upon the judgment that Homœopathy was a new and better revelation of science, a dispensation sent to soothe humanity out of all its ills, and rescue it from Allopathy, which was not a healing but a destructive practice, and a scandal to nature and her God. I shall ask it to remember that the class to which our recanter belongs, unrestrained by the experiences of a generous culture, have ruthlessly vilified our profession and its scientific claims; and of all this class, and those who are now engaged in showing the affiliation of Homœopathy and our science of medicine, none have ever asserted more loudly the utter and complete difference between the two than the recanter himself.

For myself I protest against the affiliation of such men with a *corps* to which belonged a Larrey, and which now comprises a Hamilton and Flint. I protest again, to the entire position and *faith* of these men towards the medical world, seeing that they are not at all prepared to assume the places they *would* occupy.

I trust my medical seniors are not to be deceived into the admission of their terms, that *our science as a law or system includes any of their pretensions as dispensers of medicine*, which is precisely what they desire! I said above that I did not object to certain acts of our recanter, but as one who values candor higher than the Homœopathist does gold, I object to the want of candor hidden in his confession, that he is opposed *to any one* system. If he will say that there is one science or system of medicine, and that system not Homœopathy—and not say that system includes Homœopathy, or Homœopathy is a part or fragment of that system, *I will believe him.*

In the preceding it was said, that this class of people are wholly devoid of insight into disease; but this is not all, for it is equally true that they are devoid of all literal knowledge of the physiology and pathology of the human structure. Nor have they, as a rule, any hint of the amazing advances in these departments since Hahnemann's day; nor that such advances have any essential bearing upon the treatment of disease. It is rather too little, in truth, than too much, to say, that they are totally unaware that these developments of science turn out to be related in the closest way to the etiology and treatment of disease. Here and there, perhaps, in great cities, you may find one that seems in some *illegible* way to see *that* something has been done, but not at all to know anything of *what* has been done.

Here the whole breath of an honest man stops with amaze, to see this class of gainers by a popular delusion, entirely *illiterate* in physiology, surgery, surgical anatomy, pathology, or obstetrics; with not even skill enough in these departments to lance a gum or an abscess, to treat an internal or external lesion, or even deposit a catheter in the urethra; unable to tell a true from a mal-position of an organ, not even knowing what the true position is, and yet, as in the case before us, stepping forward to instruct us on the principles of medicine. In fact, their "system," in its character, *precludes any* demand for all this varied store of knowledge, and aspires to the millionth dilution as its goal, and the *inane in quantity as its proper Heaven.*

For, indeed, as one may very easily see, what have the revelations of science to do with a "system" which denies that the true state of the body, anatomically and physiologically, as disclosed in these researches, is the criterion of disease, and the guide to cure, and proceed upon the imaginary absurdity that certain immediate alterations (called symptoms) induced in the circulatory functions by *doses of Homœopathy, constitute the principle of curation;* and the especially preposterous absurdity, abundantly clear in this latter phrase, is not ours, but "Hahnemann's law, Similia," fairly stated, and divested of its scientific pretensions.

But, enough has been said to vindicate our judgment concerning Homœopathy; and to show that to call it by the august name of a system of medicine, or to call its advocates Medical Directors, in virtue of their being Homœopathists, is to outrage every scientific instinct. I cannot, therefore, see, that one recanter's confession should enable him to pass muster, or entitle him to a new standing. We should like to have said a word upon the various formulæ and views of Hahnemann, but must postpone this until another opportunity.

Timon.

Aug. 10, 1861.

AUTHORITY OF MEDICAL MEN IN THE ARMY.—CORRECTION.

[To the Editor of the American Medical Times.]

Sir:—Will you allow me room to say that in the last paragraph of my first article under the above heading, reading, "the position of the medical officer is so humiliating, etc.," I referred entirely to what I had seen in the relations of volunteer commanders and surgeons in the volunteer companies, and not to the Medical Staff of the Army. The language, which was sufficiently correct when referring to the former, in instances I had heard of, was wholly untrue as respects the Army Medical Staff, the gentlemen of which, I need hardly say, would hold no position and tolerate no relation not agreeable to the highest self-respect and professional dignity, and who would suffer no such attitude towards them as I have known volunteer colonels to assume to volunteer surgeons; and it was this last alone I aimed at. Even this, I believe, is not as objectionable as it was in the early days of enlisting.

Yours, R. K. Browne.

FOREIGN CORRESPONDENCE.

Letter from C. Y. Swan, M.D.

PARIS.

Aug. 24th, 1861.

When, a few years ago, Mons. Maisonneuve proposed to amputate limbs without knife or saw, the whole profession joined in denouncing him. The end to be attained was well approved, but the manner of accomplishing it was considered too indecorous, too barbarous for any country so civilized as France. Still he persevered. The fact that four-fifths of the large amputations performed in Paris ended fatally, was a strong fact in his favor. Bistouries were poniards, and all bistoury men murderers, said Maisonneuve, and therefore how grand the *procédé* that needed neither. This process, as you will remember, consisted in first breaking the bone at the point he wished to amputate, and then going through the soft parts with his ligature. The bone-breaking machine still exists, and a few months ago I saw him use it to fracture the femur for deformity from anchylosis at the hip-joint. It resembles, more than anything else, a monstrous écraseur. The particulars of it are too complex for intelligent description without diagram; but, imagine an instrument that would take the place of your two hands and knee, when you go to break a stick, and you know enough. The first machine of the kind is said to have been planned by Bizzoli of Bologna.

The ligature is an écraseur, like Chassaignac's, excepting that, instead of a chain, are ten wires of ordinary cage size rolled together; and, like the écraseur, leaving the parts torn and crushed, it was supposed that *accidents inflammatoires* would never follow. But accidents did follow, and in such abundance that the cry of "murder" recoiled on Maisonneuve, and he was forced to abandon his operations.

The failure was great and complete. However, such a sincere advocate of surgical progress could not be expected to rest long under defeat, and so he is at war again against the scalpels. With this innovation he is equally sanguine; and declares that, in a few years, there will not be a bistoury in the field. As a means of removing certain tumors, I believe it has always been an equal thing between "cutting" and "burning;" but, when legs will be amputated by caustics, the bistoury is beaten. Such, indeed, is the newborn method of Maisonneuve. He proposes to *burn off* arms and legs. He will remove any member or portion of the body without *any* danger as attends the bistoury, by the use of his *flèches.*

The composition of these *flèches* is not new, it being simply chloride of zinc, flour, and water; but their form and style of application are claimed as original. When the paste dries it is hard; and of the several shapes in which it is cut, the most common is that of a triangle one inch at base and running two or three inches to point.

The old manner of using caustics was to cover the *surface* of the offending part, which was painfully slow and needed numberless reapplications. Maisonneuve, however, attacks at once the *bottom* with the top. It is fearful to see him operate, as he does in his wards almost every morning. Regardless of nerves, or arteries, or veins, he plunges the scalpel and instantly succeeds it with a *flèche*—another plunge, another *flèche*—another, and so on until he has driven in thirty, or until the tumor is entirely circumscribed by these burning spikes. The patient is never anæsthetized. The parts remaining undestroyed after twenty-four hours are attacked again, and so on until the tumor, or whatever it may be, falls off. Some tissues resist the caustic more than others. The breast, for instance, melts before it like so much snow circumscribed by fire; whereas, muscular fibre stands firmly for double the time. Large vessels are often severed, but no hemorrhage ensues—no erysipelas ensues—no phlebitis ensues—nothing ensues to the flèches but a healthy granulating surface.

How soon M. Maisonneuve will commence to amputate legs by this means, I don't know; but he has said he will do so before many months.

He gives lectures now twice a week, at the Hôpital La Pitié, to quite a large class of students, on the subject, "Progress of Surgery;" and my next letter will be about his treatment of fractures, etc.

Army Medical Intelligence.

Brigade Surgeons.—The following Brigade Surgeons were this day assigned to duty, to report as ordered below:—S. W. Gross, to Brig.-Gen. Anderson; J. D. Robinson, W. Clendennin, C. G. Shumard, to Maj.-Gen. Rosencranz; J. E. Quidor, A. B. Campbell, J. V. Z. Blaney, G. Martin, N. R. Derby, to Maj.-Gen. D. Hunter; C. McMillan, J. H. Brinton, P. W. Ellsworth, S. V. Bell, A. H. Hoff, to Maj.-Gen. J. C. Fremont.

Dr. Tarrant A. Perkins of Illinois, has been appointed Brigade Surgeon.

Army Surgeons for Ohio.—At the third meeting of the State Medical Board, for the examination of candidates for the offices of Surgeon and Assistant-Surgeon, the following gentlemen were approved and recommended to the Governor for commission:—*Surgeons*—J. R. Black, Hebron, Licking Co.; Abraham McMahan, D. E. Wade, Cincinnati; J. R. Arter, Salineville, Columbiana Co.; A. R. Fifield, Conneaut; Henry T. Greer, H. F. Grove, Washington, Guernsey Co.; Alex. McBride, Berea, Cuyahoga Co.; P. A. Gordon, Mansfield; Joel Pomerene, Mt. Hope, Holmes Co.; Alfred Taylor, Cleveland; W. H. Lamme, Centerville, Montgomery Co. *Surgeons' Mates.*—B. F. Miller, Cincinnati; J. C. Denise, Dayton; J. L. Mounts, Morrow; W. H. Park, Tiffin; T. J. Smith, Warren; A. Wilson, Sidney; E. Y. Chase, Zanesville; A. Longwell, Delaware; W. R. S. Clark, Bucyrus; A. H. Bundage, Berkshire; J. H. Whitford, Circleville; A. G. Hart, Hartford, Trumbull Co.; Geo. E. Sloot, Elyria; J. G. Purple, Painesville; E. Sinnet, Granville; C. B. Richards, Bellevue; H. L. Cheney, Groveport. The following named Assistant-Surgeons were recommended for promotion: Drs. K. Wirth, 9th Reg.; R. W. Thrift, 13th Reg.; W. C. Daniels, 14th Reg.; J. G. Cleveland, 15th Reg.

VARIOLOID AT FORT MONROE.

[Army Correspondence of the American Medical Times.]

Some remarks of a correspondent in your issue for Sept. 7th make it necessary that I should, however loath, recur to this apparently interminable subject.

Dr. White says I misquoted him, that he said there had been (July 16th) no cases of "variola" in the department of Eastern Virginia, that he said nothing about varioloid. Cases of varioloid there had been, to be sure, in that department, but that, in Dr. White's opinion, is apparently a very different thing from variola, so *very* different and so trifling and innocent an affair to appear among large bodies of troops as to be quite unworthy of mention. When I wrote the letter in which I am accused of misquoting Dr. White, his communication was not before me; I did not pretend to use his exact words. A very unmistakable conviction was in my mind that he wished to convey the impression that nothing like small-pox had appeared in the department of Eastern Virginia, and that, therefore, the vaccination and re-vaccination of the troops at Newport's News was not necessary or in any way called for. What of Dr. White's letter of July 12th, that touches on this matter, is as follows: "This invasion of Rubeola gave rise to the *ridiculous* rumors of the prevalence of *small-pox* among our troops. There have been *no* authenticated cases of *variola* in this division of the army. Dr. Eisenlord of the 7th New York volunteers (Col. Bendix), had two cases about June 20th, which he *at first thought to be varioloid.*" (The italics are mine.)

It seemed to me that these few words were intended to convey a distinct assertion that neither "*variola*," "varioloid," nor any other form of small-pox had, on the 12th of July last, appeared among the troops in the department of Eastern Virginia. I have read them over and over again, and still think that such is their meaning or they have none.

Now I would ask why Dr. White said not one word, in his letter of July 12th, of the five cases reported as "varioloides" in Dr. Sanborn's condensed return from Camp Butler for the month of June. That document was in the office to which Dr. White is attached long before the 12th of July. Dr. White had read it, for, in his letter, he alluded to matters contained in it. Perhaps if he had mentioned that five cases even of "*varioloides*" had occurred in one regiment, and within about a fortnight, it might have appeared to most readers that "rumors" of small-pox in the department of Eastern Virginia were not so *very* ridiculous after all. It would strike most persons, *not* in the army, that something a little like misrepresentation and unfair quibbling is perceptible both in your correspondent's letter of July 12th and that of August 24th, which seeks to explain it.

As to Dr. Eisenlord's certificate that the five cases were of varioloid, that the subjects had been vaccinated, &c., &c., I would say that two of the cases (one *in* the regiment and one of a negro *not* in the regiment, but under the care of Dr. E.) were of *variola*, and that one (the negro) had never been vaccinated. It is not unusual for every case of *variola*, however severe and marked, to be called *varioloid*, if the subject has ever been vaccinated. This mode of diagnosis is convenient enough, its accuracy is another matter. If Dr. Eisenlord has adopted it he may consistently aver that all the cases *in* his regiment were of varioloid, for I am inclined to think that they may all, at some remote period, have been vaccinated. It is worthy of remark that, in his letter of July 12th, Dr. White states that Dr. Eisenlord *had*, about June 20th, two cases which *at first* he *thought* to be varioloid. On August 24th, with no new light on the subject, he (Dr. E.) certifies that, during the month of June there were five cases of *undoubted* "varioloid" under his care. Small-pox appeared in Dr. Eisenlord's regiment early in June; at the time of my arrival at Camp Butler (June 28th) he had neither made nor ordered any inspection of his men with a view to protection, nor had one of them been re-vaccinated by him or his order. The order from Surgeon-Gen. Vanderpool to vaccinate all New York regiments, had been disregarded by Dr. Eisenlord; not one of his men had been vaccinated or revaccinated under that order. Dr. E. told me that he had often "thought" about attending to the subject, but the pressure of other duties had prevented. He seemed glad that I had come to Camp Butler, and that in future his mind would be relieved of such an unpleasant amount of "thought" for the welfare of his men. Of some other matters alluded to in Dr. White's letter, as they do not at all concern me personally, but gentlemen who are amply able to speak for themselves, I shall take no notice.

I am fully satisfied by ample experience and observation that a full, rigid, and methodical inspection of the entire army of the United States, with a view to protection from small-pox, is very much needed, and would be a measure in the highest degree useful and enlightened. Whether Gen. Butler's order to me to inspect and vaccinate all the troops in his depot was wise, is not for me to say; that it was intended to serve the best interests of the station I am sure. For myself I must claim immunity from any blame connected with the irregularity of that order. It was known that I had devoted some special attention to vaccination and kindred subjects; I was not surprised, therefore, though much gratified, when, without the slightest previous intimation, I received on the 20th of June last, Gen. Butler's peremptory order alluded to. On the following day, by great exertion, and with considerable personal sacrifice, I took my departure; arrived in Virginia on the 23d, went to Newport's News; found small-pox there; commenced at once to fulfil the duty demanded of me, and, considering it of the highest importance that all the troops at that post should be protected, went on and completed my inspection as rapidly as possible. When I had proceeded thus far, I wrote to Gen. Butler, declining to continue the execution of his order without authority from the Secretary of War—such authority was applied for and refused, so the matter ended.

It will be seen, therefore, that I went to Fort Monroe in obedience to an order, of the authority and regularity of which I had not a shadow of doubt; that so far as I executed that order, I did so from a sense of duty to the country and to humanity; that as soon as I had protected, as fully as I could, such troops as were exposed to the contagion, I declined to go on without an authority which should be respected by all, whether "regular" or "volunteer."

It may not be amiss for me to say, in conclusion, that for services of mine in this matter, I have not, as yet, received one farthing. My practice has been seriously injured, temporarily at any rate, and I have been subjected to considerable necessary direct loss and expenditure.

Should I eventually receive the small amount of the claim which I have presented, I shall not be nearly half remunerated for loss incurred by innocent and undoubting obedience to an order which I considered, and do consider, in the highest degree humane and enlightened, to say nothing of much and various annoyance to which I have been most undeservedly subjected.

I still hope, however, that time will demonstrate the wisdom of the order of Gen. Butler, the *only* fault of which was, that it did not emanate from or pass through the usual and regular offices of "circumlocution," and that *then* I may gain some little applause from being the first who attempted, and to a limited degree carried out, a *methodical* inspection of the U. S. Army, with a view to protection from small-pox.

I should not inflict on your readers a communication so nearly personal in its character, were it not that I felt obliged to answer pretty fully the carpings and quibbles of your correspondent, once for all, and shall not again be tempted to trouble myself about him or his opinions.

Aug. A. Martin, M.D.

HEALTH OF TROOPS AT FORTRESS MONROE.

[Army Correspondence of the American Medical Times.]

The medical reports for the month of July, for the troops encamped and in garrison at and near Fort Monroe, show an improving state of health among the men. Fewer cases of sickness by 526 were treated in July than in June, 1861; there remained sick and convalescent on July 31, 530, but these included many sick left behind by the six regiments that were ordered away from here in the latter part of July (3rd, 4th, 5th N. Y. Vols., Baker's Cal'a Regt., and the 3rd and 4th Mass. Vol. M.; the latter left by expiration of term of service), being in fact a sick return for 13,000 men, whereas those remaining on June 30, 518, were from 10,000 men.

There has been but little tendency towards the disproportionate prevalence of any particular disease. Intermittent, remittent, and congestive fevers have increased in frequency, but have not been of a malignant type at all. Typhoid fever—accurately typhoid with all its distinctive characteristics—has been an almost unknown disease here this summer. Numerous cases of disease presented adynamic features in their course, but without consistent symptoms of enteric fever, as described by Bartlett.

In the latter part of July, ophthalmia became so common that we feared that we were about to have an epidemic of eye diseases. It seemed to consist chiefly of rather obstinate sub-acute conjunctivitis; with also acute conjunctivitis and iritis in other cases. These ceased to prevail to a great extent, after Aug. 10th. Fifty cases of diseases of the eye were reported during July, but I am sure many more occurred besides, which were not entered on the returns, for I treated several officers and enlisted men for slight conjunctivitis, who did not enter themselves on the sick report, and I have no doubt other medical officers did likewise.

The invasion and progress of the rubeola, which has prevailed so extensively in this vicinity, have now almost disappeared. As the weather became warm, the type of the disease became milder. Our rubeola began in the 1st Regt. Vt. Vols., who were affected by it on their arrival here, about May 13th last; thence it extended in spite of precautionary measures, and infected some few men of the other regiments. The Massachusetts men were taken sick with it to a greater extent than were those of the New York regiments. Soldiers coming from rural districts, from the fact of their greater exemption from exposure to the exanthemata while young, are far more liable to be affected by them when brought into contact with large assemblages of men, than are soldiers from cities or thickly populated districts. In cities and large villages, almost every child passes through with the various exanthemata, before reaching the age of puberty.

Succeeding to its prevalence among the troops, the rubeola spread among the civilians and children, what few there were remaining at the post, and lastly invaded the peace and comfort of the "contrabands" assembled here; it has not prevailed among them as an epidemic, but sporadically. In their cases the rubeola is typical, still does not exhibit the serious lesions of the lungs, intestines, mucous membrane of the eye and ear, which occurred in some of the Vermont men. There are probably about thirty negroes, adults and children, now sick with the measles, at this post.

We are informed that, during the past spring and summer, rubeola has prevailed to a greater extent, and has been of a more grave character, among the Confederate troops encamped near Norfolk, and between Norfolk and Richmond, than among our own forces.

Dr. William A. Carrington, surgeon to the 23d Regt. Va. Vols. (and lately a resident of New York), who was captured by Gen. McClellan's army in Western Virginia, and having been released on parole is here on his way to Norfolk, informs me that much sickness has prevailed in the armies in Western Virginia, much more than has occurred here. He states also that both the Confederate and Federal armies have suffered much from well marked typhoid fever, which has not, however, been very fatal.

There were discharged, on surgeon's certificate of disability, from this division of the army, for the month of July, 206 men. This evinces that great remissness has existed in the discharge of the duty of enlisting and examining the regiments.

But few fractures of bones have occurred here this summer, and these have been generally of only usual interest, except the two cases of fracture of the femur by balls at the affair at Big Bethel. Two fractures appear on the reports for July. Of diarrhœa, fewer cases by 790 occurred in July than in June.

Of those cases of interest I mentioned in my letter in the "Times" of July 20th, James Garbett, gun-shot wound of thigh, fracturing femur, went home on furlough on Aug. 16th, almost well. Shortening less than one inch.

Philip Sweeny, gun-shot wound of thigh, fracturing femur near the hip-joint. The wound of exit, through the inner border of the gluteus muscle, has closed. The wound of entrance, anterior, still discharges somewhat, but is nearly filled by granulations, and is healthy looking. His general condition is improving. Callus has been thrown out, and partial union has taken place.

Conrad Ganth, wounded in left hypochondrium, improved steadily till about a week since, when he had a temporary recurrence of vomiting, preceded by a chill. He is now doing well again. He has recovered his strength and appetite to a great degree. We anticipate for him a speedy recovery. Further examinations of his wound confirmed my statement, that the ball *in all probability* did not enter. A majority of the surgeons who saw him soon after he was shot, came to that conclusion. Conservative surgery has had several minor triumphs, in addition to the great ones of having saved the two above mentioned thighs.

One of the Cal'a Regt. (Baker's) had his thumb and forefinger shot off, involving their metacarpal bones, and taking off the styloid process with a little of the shaft of the radius. Drs. Baker and Dwinelle, surgeons of the regiment, amputated the involved part of the hand, and removed the lower end of the radius, and though having but very little left for a flap, closed up the wound neatly. He went home on furlough about two weeks since, healed, with three sound fingers left, over which he has much control. Dr. Hunt, of the 10th N. Y. Regt., and Dr. Bontecou, of the 2nd N. Y. Regt., have each had cases of gun-shot wounds of fingers, in which they have saved the rest of the hand by amputation of the involved parts with a portion of their metacarpal bones.

From the consolidated report of this division, I glean the following statistics of leading diseases:—July, 1861, strength of command about 7,500; taken sick during the month, 3,692; returned to duty, 3,361; discharged from the service, 206; died, 5; remaining sick, 212; remaining convalescent, 318; total remaining, 530. Diseases of organs connected with digestive system, 1,784; diseases of organs connected with respiratory system, 200; diseases of fibrous and muscular structures, 241; wounds and injuries, 330. Leading diseases—diarrhœa, 1,237; rheumatism, acute and chronic, 239; constipation, 211; malarial fevers, 120; other fevers, 54; dyspepsia, 93; incised, contused, and lacerated wounds, 138; gun-shot wounds, 24; rubeola, 24; colica, 69; bronchitis, 100; gonorrhœa, 49; cholera morbus, 18; ophthalmia, 34; other diseases of the eye, 16; syphilis, primary, 15; syphilis, consecutive, 26; debilitas, 63; cephalalgia, 60; contusio, 77; phlegmon, 53; phthisis pulmonalis, 7; pneumonia, 8. Of the twenty-four cases of rubeola, eighteen were in the 1st Regt. Vt. Vols.

The four cases of amputation, following the action at Great Bethel, and mentioned in my former letter, have recovered favorably, and all four have some time since gone home on furlough.

The five deaths that occurred in the division during July, were from perforation of intestine from impaction of fæces. One, 9th N. Y. Vols., phthisis pulmonalis; one, 9th N. Y. Vols., vulnus sclopeticum; one, General Hospital, Cal. Regt., febris typhoides; one, 20th Regt. N. Y. Vols.; one. General Hospital, 4th N. Y. Vols.

The Medical Director's office has received samples of cotton prepared with a styptic solution, intended to be used as bandages or as pledgets for field use, for arresting hemorrhage. It seems likely to be serviceable to the surgeon, or even to the non-medical, for emergencies. We shall give it a trial. It is prepared by Mr. Henry Johnson, Druggist, Chester, Penn.

The office has also received specimens of "Melvin's Improved Adhesive Plaster," which is rendered adherent by moisture instead of heat. It comes in rolls like tape, being ready cut. It claims superiority over the isinglass and common adhesive plasters, in being unaffected by extreme cold or very hot weather, being always in good order for use. This will also be tested. It is prepared by Joshua Melvin, Lowell, Mass.

The Hygeia Hotel Volunteer Hospital, officially called the U. S. General Hospital at Fort Monroe, is now under the complete charge and immediate control of the Medical Director. The irregularities that have prevailed there during its late management are being rapidly corrected.

My letter in the "Times" of July 20, was written and mailed hastily, and contains an error:—The number of cases of measles in the 1st Regt. Vt. Vols. should have been stated as 92, and not 121. I also omitted therein to speak at length on varioloid, as I had intended to. Five cases of varioloid occurred at Newport News, in June, 1861, reported by Dr. Eisenlord, 7th Regt. N. Y. Vols. These cases were, as I am positively informed by Dr. E., of men who had been vaccinated, and the disease took a very mild and modified form. *No cases of variola, or unmodified small-pox, have occurred in this division of the army.* It is true, also, as I stated, that the invasion of measles in this vicinity, in May last, gave rise to much apprehension among the non-professional here of the approach of variolous disease, and gave rise to the rumors at the North, that small-pox was raging among the troops here. I knew of one poor fellow, sick with measles, who was greatly scared by the fact of a *surgeon* declaring his disease to be small-pox; it was an indubitable case of rubeola. All this occurred more than a month before the occurrence of the first case of varioloid.

CHARLES B. WHITE,
Assistant Surgeon, U. S. A.

CAMP OF INSTRUCTION AT NEW YORK.—The Government has directed the formation of a Camp of Instruction in the vicinity of New York. EGBERT L. VIELE, ESQ., has been appointed a Brigadier General, and is to locate and organize the camp. The appointment is most judiciously made, as MR. VIELE has belonged to the regular army, and distinguished himself in the Mexican War.

Medical News.

REGISTRATION OF BIRTHS.—The English Registrar-General stated the other day, in his evidence before a Parliamentary Committee, that the number of births in England that every year escaped registration, is probably 20,000, or three per cent. of the whole number of births—a large omission, sufficient to affect considerably calculations based upon the returns. At the recent Census, the number of persons in England and Wales was less by 126,400 than the number that might have been expected to be found, from the mere excess of registered births over the deaths since the Census of 1851; but, of course, allowance has also to be made for the 200,000 births that are estimated to have escaped registration in the interval since that Census, making altogether a deficiency of no less than 326,000—apparently the ten years' excess of emigration over immigration in this part of the United Kingdom. The chief part of these 20,000 births which annually escape registration in England, are illegitimate births in London and other towns, the parties wishing for secresy. There are streets noted for such cases; and in ten days or a fortnight after the birth, the parties have disappeared.—*Brit. Med. Jour.*

NEW SURGICAL PRINCIPLES.—Prof. E. S. COOPER, of the *San Francisco Medical Press*, lays down the following propositions, upon which he invites criticism:—

"1st. That atmosphere, admitted into the joints or other tissues, is not a source of irritation or injury, except where it acts mechanically; as, when admitted into a vein, by producing asphyxia; into the thoracic cavity, by its pressure producing collapsing of the lungs, or when, by the long-continued exposure of a large amount of surface of any of the internal organs, whose normal temperature is much above that of the atmosphere, it reduces it so as to produce a morbid action.

"2d. That the division of entire ligaments about the joints is no impediment to their ultimate strength and mobility; but, on the other hand, this operation will often greatly facilitate the cure, by enabling the surgeon to open the affected part fully, for the purpose of applying medicinal substances to the articular surfaces, when these are ulcerated or otherwise diseased.

"3d. That the only true mode of treating ulcerations of bone, however slight, within the joint, is to lay it open freely, and apply remedial agents directly to the part affected.

"4th. That opening the joints early, in case of matter burrowing in them, is far more imperiously demanded than the opening of other parts thus affected, and the operation produces no further pain or inconvenience to the patient, in any respect, than when performed on parts remote from the joints.

"5th. That after opening a large joint, the knee, for instance, by an incision several inches long, the wound should be kept open by the introduction of lint, or other similar substance, until the parts within the articulation become healthy, and, in all cases, it should be made to heal by granulation.

"6th. That extensive wounds, opening freely the large joints, such as the knee (even when lacerated, as by a saw, which must necessarily heal by granulation), do not as often give rise to violent symptoms as very small wounds, such as are made by the corner of a hatchet, an adze, or a penknife, which heal on the outside by first intention.

"7th. That there are no known limits beyond which a tendon will not or cannot be reproduced after division, provided the parts are made to heal by granulation, and that the present acknowledged rule of two inches being the maximum distance in which the divided ends of a ligament or tendon can safely be separated, has not the least foundation in fact."

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
Session 1860-61.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VIII. Part I.

Anatomy and Physiology of Mucous Membrane in General.—Nature of its Secretion.—General Pathology of Mucous Membrane.—General Etiology.—Primary and Secondary Nature of Diseases.—External Injuries.—Cold.—Atmospheric and Epidemic Influences.—Constitutional Poisons.—Contiguity and Sympathy.—Different Forms and Symptoms.

I have several times alluded to certain qualities and actions of the mucous membranes in general. But you will better understand many of the foregoing remarks, after following me in the investigation of several anatomical and physiological facts, concerning both the structure and function of the mucous membranes. And certainly, they are deserving of every attention that can be bestowed upon them, not only on account of the large surface they cover, but also in consequence of their physiological and pathological importance. As the cutis forms the external integument of the body, so does the mucous membrane form the internal covering of any and all the organs. Thus, we find them all over the respiratory, digestive, uropoietic, and sexual organs, and in all those isolated cavities, like the maxillary and frontal ones, which are connected with the larger ones by narrow ducts; further in the glands, the affections of which are either genuine and primary, or continuations only of a morbid process on a mucous membrane, and their ducts; the conjunctivæ, the external ear, and the galactiferous ducts of the female breast.

The mucous membrane of an organ or a system is not confined to certain limits. Except on the lips, on the external ear, and other localities where we distinctly perceive the gradual replacement of epidermis and cutis by mucous membrane, we are nowhere enabled to determine where the mucous membrane of this organ or system finds its end, and that of the other commences. Thus, there is no boundary between the mucous membranes of the digestive and the respiratory organs, nor any between that of the stomach and the duodenum. Their internal structure is alike, and therefore I deem it more proper henceforth to speak rather of mucous membrane, than of mucous membranes. Its uniform layer consists of dense connective tissue, intermixed with bloodvessels and elastic fibres, in its deeper laminæ with muscular fibres also, and is covered with several layers of epithelial scales, which are readily thrown off and renewed; they may, however, be accumulated in yellowish, brownish, or black masses. Beside the bloodvessels there are lymphatic vessels, and the smallest ramifications of nerves, which are particularly found in the papillary prominences. They are either the last ends of a cerebral or spinal, or of the sympathetic nerve; the peculiar actions of these several nerves determining the functions of the locality in which they spread. The mucous membrane, influenced by the cerebro-spinal system, is more sensitive, as a general rule, than such localities in which the power of the sympathetic prevails. Thus pain depends on the seat of the affection just as well as on its acuteness; the degrees of temperature are discerned by the pharynx, but not by the stomach or intestine; urine produces no pain whatever on the mucous membrane of the urinary bladder and urethra, but very much so on that of the conjunctivæ; and often irritations meeting a mucous membrane effect no pain nor other local disturbances, but sympathetic sensations, like coughing or sneezing.

The functions of the mucous membrane are both various and important. It takes a prominent part in assimilation and sanguification, and therefore suffers in all general, and all those local diseases that in any way influence the general condition of the organism. They are frequently first affected in a large number of diseases, many of which are primary; for the immense extension of mucous membrane, increased by indentations, villi, glands and glandular ducts, and papillæ, is such that morbid processes may easily take place in one part or another. The influence of the diseased mucous membrane is, moreover, as great as its affections are frequent; the vital importance of the membrane itself, the legions of nerve ramifications in its tissue, and the contiguity and rapidly developed consecutive affections of the mucous membrane contributing to the same result. The occurrence of œdema of the glottis in catarrh of the pharynx or larynx, or of collateral œdema of the vocal cords in diphtheritic inflammation of the larynx, are distinct and much dreaded proofs of this fact.

In its normal condition the mucous membrane exhibits a peculiar tough, whitish or clear, more or less transparent, alkaline secretion, called mucus. It contains mostly epithelial scales, more or less transformed, of every variety; pavement, cylindrical, and vibrating, the latter without its cilia; further, round granulated cells with one or more nuclei, and a clear transparent liquid. Epithelium, mucus, and pus, are found combined in many instances of secretion on the mucous membrane, the three various forms being, in this locality, but three different stages of the transforming epithelium. Under favorable circumstances, the mucous membrane forms puriform elements anywhere, but there is some difference in the process. The purulent mucus of the intestine contains very seldom puriform elements, that is, pus cells, except in cases of genuine ulceration; the same result is found on examinations of the purulent mucus of the uterus and tubes. But no ulceration is required in the mucous membrane of the bladder or urethra to count immense numbers of pus cells in the puriform secretion of chronic vesicular catarrh and gonorrhœa. This difference depends on anatomical reasons. The intestine, uterus, and fallopian tubes, have cylindrical epithelium only, bladder and urethra, however, pavement epithelium. The mucous membrane will develop the more pus cells without the presence of real ulceration in proportion to the amount of pavement epithelium by which it is covered. Purulent though the secretion of other parts of the mucous membrane will look, it contains frequently nothing but cylindrical epithelium. The angular shape of the pavement epithelium enables it to form a cohering covering, which is not thrown off so easily as the round pus or mucous cells; thus the lower layers have full time to develop into mucous cells; which result being obtained, the whole mass is thrown off by either the pressure of the subjacent new layers, or the influence of a thin and less cohesive transudation from the blood-vessels, which, in its turn, forms another important element of the secretion. Whether it has a more important part than to be one of its elements, whether, for instance, from its substance cells may be developed, or whether the cells are under all circumstances but the later stages in the development of epithelial scales, is still an open question. This is certain, that what is called mucus is by no means always the same liquid, no more so than that the secretion of the external skin is alike on every locality of its surface. Its reaction is acid in the stomach, alkaline in the mouth and intestinal canal; a mucous substance is secreted from the parenchymatous substance of some organs, without the presence of cells; there are pathological liquids, as colloid, very similar to mucus; there is the substance called after the name of Wharton, in the umbilical cord of the fœtus and newly born, the cellular development of which cannot be traced;

and nevertheless this "gelatinous connective tissue" is transformed into mucus. Thus from an anatomical point of view the secretion of the mucous membrane is not a uniform substance; neither is it uniform as to chemical composition. I have stated that its reaction differs according to localities. It frequently contains albumen, some little fatty substance, extractive matters, and some mineral elements, as chlorides of alkalines and phosphates of earths. These mineral elements belong to the mucine, which is a nitrogenous, albuminous substance, swelling in water, but not dissolved by it, and to which the mucus owes its tough nature. Its chemical reaction differs according to its percentage of minerals, combination with other poisonous substances, or its own peculiar modifications. This difference is easily explained by the fact, that it is not preformed in the blood and thrown on the surface, but is a production of the mucous membrane itself. Thus its constitution depends on the amount of follicles, epithelial scales, papillæ, and on the character of the epithelium; no matter whether it is formed directly from the epithelium undergoing its final changes, or from transudation through the walls of the capillary vessels.

In regard to the diseases of the mucous membrane I have already stated both their freqnency of occurrence and their proclivities for complication. Their tendency to sickness is, however, not uniform; individuality and age belonging to those influences which are most apt to modify the alterations taking place in their tissue or secretion. Affections of the mucous membrane are very rare in fœtal life, because of the absence of both mechanical injuries and functional disorders. In infantile age the mucous membrane reaches its greatest importance, new influences acting upon it and calling into life new functions, especially the normal state of injection, which is very considerable indeed. A very common alteration taking place in the mucous membrane is mollification; plastic exudation, hemorrhage, suppuration, and ulceration, being very rare in the first year of life. After this time exudative processes are more numerous, especially fibrinous exudations are not unfrequent. This pre-disposition of early age to contract diseases of the mucous membrane, is afterwards decreasing, is not very common in advanced age, until in senile age it is rather increasing.

A number of diseases of the mucous membrane in early age are of a primary nature, and many of them result from direct local injuries. It is a singular fact, however, that thorough and deep local injuries, cuts and wounds of any kind of the mucous membrane, dangerous though they look, are attended with very little danger in the majority of cases; they will generally heal readily and lose nothing of their merely local character. Thus foreign bodies entering the substance, combustion destroying the structure of the mucous membrane, although sometimes among the causes of a disease, will not so frequently give rise to a severe affection, as a less serious injury often repeated. Animal or vegetable parasites, and indigestible food, will therefore, as their influence extends over a longer period, although their sudden insult is often but inconsiderable, be among the most frequent diseases of the mucous membrane of the digestive organs. Another very important and frequent cause of diseases of the mucous membrane is refrigeration. We are entitled to state this as a fact, although we do not know whether cold acts by the suppression of cutaneous secretion alone, or by some influence on the peripheric cutaneous nerves and reflex action alone; or by both. It is however a fact that especially the mucous membrane of both the respiratory and digestive organs is very subject to the influence of cold, together with the other causes of disease depending on the general condition of the atmosphere, and the changes and general influences of season, of epidemics and endemics.

These latter are of great importance in the etiology of the affections of the mucous membrane in early age; for we know that not only malarious influences and animal effluvia will readily act on the impressible infantile organism, but the constitutional and contagious poisons are mostly observed to produce their peculiar forms of disease in infantile age. Thus children are the majority of patients suffering from eruptive fevers; scarlatina, measles, and diphtheria, mostly attacking the infantile organism. And here it is important to state, that a peculiar part of the mucous membrane has always a tendency to be affected by a peculiar constitutional poison, both in early and advanced age. Thus diphtheria, scarlatina, syphilis, and mercurialism show a predilection for the mucous membrane of the mouth and pharynx, typhus for the ileum, dysentery for the colon, measles and iodism for conjunctivæ and nose. All such affections, although common to every age, are mostly found in the infantile period, the modes of propagation and transmission being eminently distinct at this period of life.

I have frequently alluded to many cases of secondary affections of the mucous membrane; they are the usual results of either local propagation in the continuity of tissue, or of sympathetic spreading. We know from general pathology that there is a direct connexion between cutis and mucous membrane, scalp and nose, mamma and uterus, urethra and testicles, and stomach and brain; we need not be astonished then, that there is a contemporaneous affection sometimes of the mucous membrane of the nose and the lungs, the larynx and trachea being free from disease; or of the stomach and colon, the small intestines being not at all affected. And the spreading of affections of the mucous membrane on continuous tissue is so very general, that lobular pneumonia, for instance, is in all cases recognised as the termination of a catarrh of the bronchi; and a protracted catarrh of the colon with ulceration of the follicles is known to be a usual consequence of catarrh of the small intestines. Nor is the topical propagation of affections of the cutis over the adjoining mucous membrane an exception, but the rule. The transmission of diphtheritic and other processes of the external integuments of the lips, anus, and pudenda majora, on the mouth, rectum, and vagina, are frequently observed.

Thus it appears that nothing is more natural than a universal or wide-spreading hyperæmia, changes in both quantity and quality of secretions, rupture of blood-vessels, and even neoplasms. The alterations observed in the secretions are frequently more important in relation to post-mortem epicrises, than the anatomical change of the tissue itself; for you have learned already, from a previous lecture, that not unfrequently no anatomical trace is detected in patients who have died from, or with, hyperæmia of the brain, pharynx, intestines, or cutis. The abnormal secretions are therefore as important elements in regard to the results of post-mortem examination, as they again are ready causes of renewed attacks, from the local irritation depending on their presence on the membrane. The prognosis, therefore, depends greatly on their nature and amount, and frequently as much on them as on the structure of the membrane, its epithelium, follicles, or papillæ. To a great extent they also influence the symptoms, amongst which functional disorders and anomalous secretions are always prominent. Pain is sometimes observed, but it is frequently indistinct and obscure. Of more importance than the latter, however, are some indirect symptoms, of which reflected motions, and even muscular paralysis, are frequently met with. Thus, sneezing, coughing, vomiting, and tenesmus are brought on. Disorders in neighboring or distant parts are effected by the suppression of secretion and injection of the tissues; topical spreading on the subjacent submucous tissue, as in œdema of the glottis, and retro-pharyngeal abscess; and participation of the whole system.

After these general remarks you are enabled to trace a direct connexion between even the slightest causes and severe affections. I have taken particular pains, in former lectures, to present for your inspection a number of affections which, severe though they be, owe their origin frequently to a comparatively insignificant cause. The greatest stress has been laid by me, further, on the large number of slight or important causes giving rise to affections of the mucous membrane. That in some cases an abnormal process of dentition will prove a source of evil, I do not deny; but from many previous remarks, and from comparison with other causes of diseases, you have arrived at the conclusion that the vast majority of diseases of the mucous membrane allow of another explanation than the blind assumption of the culpability of a physiological process. The great progress of pathological anatomy and differential diagnosis ought not to be lost on us. The period, where the diseases of small children consisted in dentition, of advanced ones in worms and scrofula, of adults in rheumatism, scrofula, and syphilis, is past. With sound principles in pathology, and a correct knowledge of pathological anatomy and differential diagnosis, all the different and numerous affections of the mucous membrane: simple injection, with or without extravasation; acute hyperæmia, with increase and alteration of the secretion, and follicular swellings; acute serous or bloody exudations, with more or less severe symptoms; pseudo-membranous deposits of epidemic, syphilitic, or mercurial character; purulent discharges; ichorous decomposition; chronic alteration of both vascularization and secretion; hemorrhage; œdema; hypertrophy and whatever changes we have learned to take place in the mucous membrane of all the organs that have been submitted to your attention in previous lectures—will no longer present to you the difficulties of bygone times, nor urge upon you the necessity of resorting to an obscure, generally erroneous and improbable, and almost always unproven explanation.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. VII.

Disorders of the Apparatus of Digestion.

Commencing with the liver, as the grand controller of the rest, and a sort of physiological centre, we may say axiomatically, that in all the curable derangements of circulation and secretion, of which that organ is the seat, mineral waters are not only eminently serviceable, but very often afford the only chance of relief. The kinds to choose from, are always the glauber salt, the common salt, the strong alkaline, and the sulphurous.

We will first consider what the French call *engorgement*, by which I understand *hyperæmia* without organic change of the parenchyma. Every organ has its own pathological proclivity, or tendency to a special form of disorder. Thus, the liver and spleen are singularly liable to simple congestion, often with very considerable increase of volume, not often preceded by any observable acute disease of truly inflammatory character, though sometimes a sequela of the like. In most cases, chronic in its inception, the march of engorgement is singularly chronic, and after persisting, to a great extent, for years, it may be dissipated, nor leave a trace behind. Some of the most marked cases occur from exposure to paludal poisoning, not necessarily, though for the most part accompanied by febrile paroxysms. Some are obscurely connected with attacks of bilious colic, some are a consequence of gastric and duodenal irritation, a result of prolonged dyspeptic derangement; some, so far as we can discover, absolutely idiopathic; some are necessarily consequent on disease of the heart or lungs, mechanically impeding the circulation in the liver. Here the thermal waters of Carlsbad and Vichy, and the cold of Kissingen, are particularly indicated. Of the resolving powers of the two former, it is difficult to fix the bounds. Under their proper employment, the oldest and most voluminous engorgements may entirely disappear. Even when resulting from disease of the heart, though contra-indicated by the general rule, their cautious use is of great service, causing a freer sécretion of bile of improved quality, and having a similar effect on the secretions of the stomach, pancreas, and bowels, thereby directly relieving the portal congestion, and indirectly the general circulation.

In *gall stone colic*, mineral waters afford us the only known means of relief worth resorting to. Only by their use can the peculiar biliary diathesis in which these formations occur be favorably modified, and this is the object to which we should address our endeavors. To do this, we must reduce hypæremia of the secreting organ, restore a free secretion of normal bile, a free secretion from the mucous membrane of the gall bladder and common duct, and increase the functional activity of the intestinal canal. The alkaline and glauber salt waters fulfil these intentions to perfection, notably Carlsbad and Vichy; at the same time by lowering abnormal sensibility and allaying spasm, they prepare the way for the painless dilatation of the duct, and the expulsion of the calculi.

A near connexion of my own, accustomed from his eighteenth year to consume, on an average, a pound of confectionery per day, became afflicted with such an accumulation of gall stones, that by relaxing the abdominal walls, they could be very distinctly felt forming an irregular tumor of the size of the closed fist, in the situation of the gall bladder. The engorgement of the liver became so great, that its lower border reached two inches and a half beyond the navel, measuring towards the left groin, and four inches below the edge of the ribs, measuring directly downwards. Violent attacks occurred at shortening intervals; at length so frequently, that the jaundice attendant on the one attack had not time to subside before the next occurred, so that at last his color became of a dark dirty green. In the spring of 1841, I sent him to Carlsbad. He nearly died of an attack in London, on his road to the springs; was pronounced moribund by three of the ablest physicians of that city. However, he contrived to reach his journey's end, and after a few days' use of the water, passed an incredible number of gall stones; the tumefied liver shrank to its normal dimensions, and he returned home a new man. He remained without any relapse until the second spring, when the threatening symptoms induced him to return for a short season to Carlsbad. Perfect relief was again obtained, though no more calculi were observed to pass. The next year he spent ten days at the spring by way of clenching the nail, and he continued free of colic until his death in the fall of 1847. This event was preceded by a new series of symptoms, pointing to deep-seated disorganizing disease of the liver, permanent jaundice, dyspepsia, then perfect anorexia, ascites, great prostration. The liver was found cirrhotic and studded with deposits of cholesterin, many of the size of a nut, the gall-bladder empty, and the duct enormously dilated.

I have treated several cases of varying degrees of severity with Carlsbad water, and have never been disappointed in my expectations of affording great, often permanent relief. In a case now under observation in this city, half a pint of Kissingen was prescribed by a colleague to be taken in the morning, and cold Vichy very freely during the day, often as much as six half pints, the patient being guided entirely by his own feelings and experience. In this way he has not only warded off very many threatened attacks, but recovered fine health while gradually leaving off the remedy.

When it is desirable for a patient to go through a severe course of thermal waters, which cannot advisably be attempted in winter, or at the more stormy and changeable seasons of the year, a period as remote as convenient from the expected return, should be chosen for commencing the treatment, for this has always a tendency to reproduce a paroxysm. It is, however, well known that concretions are much more apt to pass after a return so induced, than at any other time. The course should always be reiterated the following summer, or even several seasons in succession, especially with the view of modifying the diathesis; and if the stronger waters are not well tolerated, there is a large choice of milder, as Ems-hot, Marienbad-Kreuz, and Eger-Franzensbad-cold.

Fatty liver, whether accompanying a state of general obesity, or a result of chronic alcoholism, marsh poisoning, or fevers, is susceptible of cure by the same means, provided there is no tumefaction of the spleen, nor dropsical effusion. So is *cirrhosis hepatis* in its earlier stages, although ascites may have made its appearance; in more advanced, mineral waters can only be used with great caution and in small doses, being in large positively injurious.

It will be advisable at this point, to take up the consideration of the disorders of the apparatus of digestion proper. The word *dyspepsia*, we will take to apply to all functional disturbances of this apparatus not attended with known organic lesion, as defective or disordered secretion, and defective or disordered peristaltic action. These again may be due to faulty hygienic influences—such as unsuitable food, irregular periods for eating, sedentary habits—or to derangement of innervation—say of emotional origin—or to some disturbance in the circulation or composition of the blood. It will be seen that most of the primitive forms occasioned by the two first classes of causes, curable by hygienic influences alone, with at most a trifle of medicine, demand but little of our attention; the mere journey, change of air, scene, and diet, are of more importance than the waters of any spring that might be prescribed. In those occasioned by the third, these hygienic influences may be agreeable and sometimes valuable adjuvants, but the appropriate mineral water will cure without them, and often where nothing else will. In the former, all the slightly mineralized waters, rich in free carbonic acid, especially if ferruginous, are elegant and useful prescriptions; the mild alkaline, as Geilnau and Fackingen, weak common salt, as Seltzer, pure chalybeate, as Spa, will prove grateful to the patient and satisfactory to the physician. They may be taken in moderate doses before breakfast, as a beverage at dinner, with the admixture of some alcoholic stimulant, if advisable, and whenever the patient feels an instinctive desire for a draught. The use of all other fluids simultaneously, should be eschewed, or reduced to a minimum. In dyspepsias, connected with a depraved condition of the blood, the waters suited to the removal of the particular dyscrasia, rheumatic or gouty, scrofulous, pseudo-syphilitic, etc., are indicated, according to the principles already laid down in these pages.

Here I may best mention the singularly soothing and sedative powers of some waters in the irritable forms of dyspepsia. All slightly mineralised waters containing lime salts, are remarkable in this respect, but the Kreuzbrunn of Marienbad, a glauber-salt water, exceeds all others in this valuable characteristic. I have abundant experience of my own to offer, but prefer to condense a case from Dr. Jas. Johnson's work on the Spas of Europe. A young lady came to Marienbad who had had hemoptysis, and was laboring under sympathetic hectic fever. The stomach would retain no food—constipation was obstinate—nocturnal perspirations were profuse. After eight days' use of the Kreuzbrunn the fever ceased, in four weeks more the stomach became retentive. She returned, however, to Marienbad next summer, with a relapse of the vomiting; eight days' use of the water now sufficed to dispel this, and she recovered her health.

All those functional disorders of the stomach and bowels depending on disturbance of the circulation of the blood in these organs, form parts of a great circle of morbid action which, to be understood, must be treated as a whole. Beautifully simple in plan, though multitudinous in relations, a clear comprehension of the circulation in the abdominal viscera, and a remembrance of the two doors by which the portal system communicates with the general—the vena cava above, and the inosculation of the hæmorrhoidal veins with the internal iliac below—will afford us means to unlock the mystery of many an obscure disorder. Here we have all the blood returning from the stomach, bowels, pancreas, spleen, entering the liver by the vena porta, there to be again distributed in its substance through a vast network of capillaries, affording to the proper apparatus the materials for the secretion of bile. Now, if there be any hindrance to the regular and free flow of this portal-blood, sometimes due to defective innervation from emotional causes, as anxiety or anger, or from excessive mental labor; sometimes to the existence of some impediment ahead of the stream, as in heart or lungs; sometimes, perhaps, to a change in the quality of the blood itself; and sometimes to a suspension of the biliary secretion from altogether obscure causes, the effects of the obstructed flow will not necessarily be confined to the liver, but may, perhaps I may say, must, be felt in other parts of that immense system of minor canals emptying into the great one. To use a familiar expression: the main channel being blocked, there will be back water up the creeks. The schoolboy overtaxes his brain, and taking alternately too little, and excessive exercise, the secretion of bile is impaired, there is obstructed return of blood from the intestinal canal, thence enfeebled peristaltic movements and diminished intestinal secretions—consequence, notorious constipation. When, with greater advance of physical development and entrance on the active duties of life, the emotions gain strength, and the general sensibility is largely increased, the functional activity of the stomach and duodenum is at its acme, hygienic rules, of diet especially, are slighted, and primary dyspepsia is the consequence; debility, loss of tone, follows excitement. Later in life, all these circumstances change, occasional debauches give place to the regular habit of eating too much highly seasoned and succulent food in proportion to the diminished call for nourishment, which, together with the persistent use of coffee and alcoholic drinks, especially those brewed from malt, and far oftener than is imagined a regular system of sexual excess, induce either a merely retarded flow of blood through the vessels of the lower portion of the intestinal canal, or a general overfilled condition of the whole portal system, often involving other viscera outside of it, the *abdominal plethora* of the Germans. An attack of piles in some, forms the natural consequence of this state of things, *and the natural relief*. Either a moderate loss of blood from the hæmorrhoidal veins directly eases the system, or the attack compels an abstinence and a medication which do the same thing indirectly.

We are now prepared to understand how and why it is that the dyspeptic of earlier years becomes the subject of piles in later, that hæmorrhoidal attacks relieve dyspeptic symptoms, that the too active treatment of the latter brings on piles; in a word, that dyspepsia and piles are often convertible diseases.

Caused by simple irregularities in the muscular contractions, necessary to the due performance of the functions of the intestinal canal, true *colics* ought, in scientific strictness, to be considered as truly varieties of dyspepsia. In a vast majority of cases, they are certainly dependent on the prior existence of disturbance in the portal circulation, for of course muscular fibre cannot maintain its normal tonic contractility, unless duly and regularly supplied with blood of a proper quality. Derange the supply, and it is liable at any moment to over-extension, on which may follow spasmodic contraction. Rectal colic is absolutely pathognomonic of portal obstruction, and as it never exists without it, can only be cured by treatment directed to remove it. Strange that a disorder so very painful and so common, should not even be mentioned by any author I am acquainted with, except Marshall Hall, who recommends a treatment eminently calculated to exasperate and to perpetuate the disease.

The tendency to these disorders of the portal circulation is hereditary, there is a hæmorrhoidal constitution naturally developing into the *hæmorrhoidal diathesis.* The latter is oftener met with in Northern and Continental Europe, than with us, or in England, and the most cases I have seen in this country, have been in the persons of Germans or in those of German extraction; though by far the worst case of *induced piles* I was ever called on to treat, was in the person of an American lady, a native of this State I believe, then in the North of Europe, who, for a long series of years, had been in the habit of taking calomel freely whenever suffering with dyspepsia; an attack of piles was forthwith brought on, and the dyspepsia ceased. Under a more rational medicinal and a proper dietetic treatment, she had no more trouble from either, during the four years she remained under my charge.

When the hæmorrhoidal diathesis is fully established, the tendency to congestion in some portion of the portal circle becomes more and more marked, and the element of periodicity is often superadded. Thus, in some apparently robust men, there will be a discharge of blood from the hæmorrhoidal veins, with as much regularity as characterizes the menstrual flow in women, and affecting the same monthly periods; and should this periodic flow be suppressed, the danger of congestion in some important organ, as brain or lungs, will be as imminent as in cases of suppression of the catamenia.

The *hæmorrhoidal diathesis*, most commonly occurring in persons of a bilious temperament, though sometimes in those of a lymphatic, renders them so liable to certain disorders, that I am almost inclined to believe there is a true pathological connexion between them. Thus lumbago and sciatica almost never occur except in the hæmorrhoidal diathesis, and are far more easy of present relief and future prophylaxis if treated on this hypothesis. In this diathesis too, affections of the urinary and genital organs are exceedingly common, and sometimes very difficult of relief. Many is the case of so-called chronic cystitis I have seen, which was simply a hæmorrhoidal congestion, that is, congestion of the submucous tissue of the bladder, or of the venous plexus about its neck, occurring in the hæmorrhoidal diathesis. It is by no means always easy to diagnose in such circumstances, but if the cystic irritation has continued long without the presence of muco-purulent discharge in the urine, if the symptoms vary very much and very quickly in intensity, if they disappear during the persistence of a spontaneous diarrhœa, returning on its subsidence, if the patient exhibit neither marked emaciation nor cachectic appearance, I should at once suspect that the case was hæmorrhoidal, and direct my investigations to the elucidation of that point. If such turn out to be the fact, we may be very sure that the usual treatment will prove abortive; we *must* attack the diathesis to be successful, at the same time that local measures may be very important and indeed necessary to the happy result.

A long series of obscure and anomalous affections in the urinary and genital organs of the male sex, especially after the age of fifty, have their origin in the same diathesis; and when so understood are often susceptible of easy cure, always of considerable amelioration, by measures taken against the original vice of portal circulation, or for the relief of general abdominal plethora, and of local hæmorrhoidal congestion.

EXPERIENCES OF CAMP LIFE.

By C. F. W. HAASE, M.D.,

SURGEON OF THE FIFTH REGIMENT OF N.Y.S.M.

In offering the following remarks to the medical profession, I am urged to do so by the practical experience which I have been enabled to obtain, by a personal acquaintance of some of the causes, the consequent results, and increase of diseases incidental to the camp life of volunteer soldiery.

The Fifth Regiment N.Y.S.M., Col. Schwarzwälder, with whom I held the position of surgeon, was composed of Germans, with but few exceptions. Notwithstanding the hard duties which the men were called upon to perform; the exposure to weather of all kinds (without tents for nearly seven weeks); diet to which they were unaccustomed; and the strict regularity of discipline necessary to control so large a body of men, I hope I may be excused in indulging in some little professional vanity in the fact of having seen every man of the regiment return, in about as good—if not better—condition than when he left the city.

The Government has been much blamed, and in many cases with good reason, for the bad provisions and quarters furnished to the volunteers. But we must not forget, however, that much of the fault may be traced directly to the inexperience—and sometimes villany—of the Quartermasters and Commissaries, elected by the complainants themselves. And it must also be borne in mind that the United States Government has never yet been called upon to maintain and support so large a force in the field, and is now required, in consequence of this unforeseen event, to exercise duties to which it has hitherto happily been a stranger. Thanks, however, to the noble labors of the Sanitary Commission, great improvements have already been effected. But, still, much remains yet to be done, and it is to them, and the medical profession at large, that the poor soldier must look for such material improvements as will prevent —I should almost rather say, arrest—the causes which are already at work to undermine the health of our army.

Let them commence with, and look closely after, the purveyors of the army, who are now (with perhaps few exceptions) composed of a heartless set of political sharpers, devoid of principle and patriotism, and only desirous to fill their pockets at the expense of their country, and the noble soldiers who sacrifice their hearts' blood to defend a holy cause. In our encampment at Meridian Hill, I was compelled to condemn the salt pork no less than three different times; once it had so poisonous an effect, that nearly a whole company was taken, after dinner, with severe vomiting and prostration. In consequence of this, much of the salt pork, as now furnished by the Government contractors, is a dead loss, for the men will rather abandon it entirely than get sick, as they know they will, by using it. As a natural result, it could be seen thrown around in all directions, thus adding another infecting effluvial agent to the camp. Would it not, therefore, be much better to substitute for it altogether, smoked bacon, as the most convenient article on the march, and decidedly more nourishing and digestible? The coffee furnished, also, was frequently mouldy and of very inferior quality, and in many cases almost entirely unfit to use. The very naive and somewhat ludicrous remark of Dr. Satterlee that, "beans kill more soldiers than bullets," is, I have no doubt, but too true. Whenever this article was served to the men, I was always prepared to have a large number of patients suffering from colic, diarrhœa, and vomiting. This was on the increase with the length of our services, showing distinctly the gradual failure of the digestive organs. This state of things, however, changed almost on the instant from the time (July 19th), when the regiment was furnished with desiccated vegetables. Of the ninety-eight cases of diarrhœa which occurred in that month, all but twelve cases were treated before the 21st. Does anybody desire a better argument than that? Still, I do not deny that the climate—we were then in camp on Bolivar Hill, near Harper's Ferry—and good water contributed largely to this remarkable change. Should, however, dried beans still be adhered to, the most harmless way in which they could be made use of, would be to have them boiled and mashed, into the form of soup.

A field bakery attached to each brigade, I think would be a great improvement, without increase of expense if managed properly. The army could be supplied in this way with good bread, instead of the hard biscuit which frequently defies the best teeth, and is fit only to be served on the march, and even then only in cases of necessity. The white bread furnished to the army is certainly very good, but in my opinion not of the quality best suited for the soldier: besides, it cannot be kept long enough without getting dry and consequently unpalatable. Why not rather supply the army with rye bread, which, in this country, is generally known as brown or German bread? This kind has many advantages over the other; it can be kept for a considerable time without getting spoiled and dry; is more palatable than white bread; more nourishing, and much cheaper, and would be an immense saving with so large an army as we now have in the field. Col. Blenker, when encamped near Washington, I believe established a field bakery, and by drawing from the Commissariat wheat flour, and exchanging it for rye, he was enabled to supply his regiment continually with good wholesome bread, and pay by the exchange all the expenses. On inquiry, I learn that wheat flour (196 pounds to the barrel), is worth from $5 to $8, and rye flour, best quality, $4.25 to $4.50. Now a barrel of either will give, with the gain in the process of fermenting and baking, say, about 4,400 ounces of bread, and by a rough calculation, the difference in figures of the cost will stand thus—

Rye Bread, of the best quality, 10½ ounces, *for one cent.*
Wheat Bread, " " 5½ ounces, *for one cent.*
Wheat Bread, inferior quality, 9 ounces, *for one cent.*
Hard Bread, at contract prices, 16 ounces, *for 3½ cents.*

I have drawn this merely to point out the relative cost: at contract prices, the flour, of course, will not come as high.

Let, however, the keen eye of improvement, above all be directed to a better management of the culinary department. No change will avail much unless this is attended to. We must not forget that the art of cooking is a profession, and as such should be regularly learned. It is foolish to expect that a soldier, who never before in his life stirred a fire, or handled a soup ladle, should all at once understand the mysteries of cooking even so plain a dinner as pork and beans. Yet it is actually the case that such men are taken from their respective companies to practise this art, no matter whether they understand it or not. They are subject to no control, and therefore do as they please; and most generally cleanliness is with them a matter of secondary consideration. I have frequently endeavored to impress upon the minds of our cooks the importance of attending to this, but not having the authority in the matter which every Regimental Surgeon should have, I found my suggestions unheeded. The food was either so greasy that the stomach revolted against it, or tasted so smoky and so much of the kettles that the tongue could not recover its sense of taste for a considerable time afterwards. In expressing the opinion that with proper cooks, more than one half of the diseases incidental to camp life might be prevented, I feel convinced that I do not say too much. It was Soyer who saved thousands of soldiers in the Crimea: then let us remember the lesson he taught us while it is yet time. I would therefore advise the appointment, to each regiment, of a good professional cook, whose duty it should be to direct the entire culinary department, enforce proper cleanliness, etc. The kitchens of the various companies should be placed together, near the camp, and not, as is now usual, scattered all over it. In fact, doing away entirely with company kitchens would save considerable expense. Ten men could easily cook for a regiment of a thousand men, while the present method requires at least double that number. This saving alone would add to an army of 50,000 men 500 fighting men—almost a regiment.

A few words about "Temperance of the Army," as the subject has been much discussed of late, and has given rise to a considerable controversy. I do not believe in the total abolition of spirituous liquors among the soldiers. I think that there are times when ardent spirits are absolutely necessary, and should be furnished to the men. But the liquor should be of good quality, and not like that furnished to us in Washington, which was utterly unfit to drink; it was the vilest stuff under heaven; the meanest grog-shop or grocery keeper in New York would blush to sell it. Whenever the Regimental Surgeon should deem it necessary to issue a whiskey ration it should be done; however, the quality should be good and the quantity small. Of malt liquors, I think Philadelphia Porter would be the best. Lager Bier in the field, and in the climate our troops are stationed in, agrees badly; it invariably produces diarrhœa.

In bringing this to an end, I cannot pass over the inefficiencies which exist in respect to the ambulances and their management. To take the ambulance corps from out the ranks is bad—but to allow men to step out of the ranks to take care of a wounded comrade, is still worse. Each brigade should have what in European armies is called the Sanitary Company, whose duty should consist in taking care of the litters, to carry the wounded from the field of battle to the surgeon's depot, and carry out such rules and laws as the Brigade Surgeon shall think proper. They should be taught to apply a bandage, and put on a tourniquet in case of need. It was, I think, the celebrated Stromeyer, who invented, during the war in Schleswig-Holstein, an excellent plan to enable him to attend to the more severely wounded first. A certain number of men of the Sanitary Company, provided with red and white flags, followed in the rear of the line of battle; when a soldier fell severely wounded they stuck a red flag in the ground near him: if but slightly wounded, and unable to make his way to the surgeon's depot, a white flag was made use of. By this guidance, the litter bearers had no difficulty to take those first who needed surgical aid most. By this contrivance it is said a great many lives were saved, and it met with general approbation. It was this surgeon also who ordered each man to put a bandage on top of his knapsack before going into action, so that this needful article, of which the surgeon cannot possibly carry a sufficient quantity with him, was always sure to be on hand.

In conclusion, I would call attention to the following extracts from my official report to the Surgeon-General, of my practice during the three months our regiment was on duty, being the basis on which the foregoing remarks have been predicated.

	May.	June.	July.	Total.
Fevers, Intermittent..	2	2	13	17
Erysipelas............	—	1	—	1
Urticaria............	—	1	—	1
Eczema..............	1	1	—	2
Eczema Impetiginodes.	—	2	—	2
Herpes..............	1	—	—	1
Colic....	50	10	14	74
Diarrhœa, Acute......	15	69	98	182
Dysentery, Acute.....	—	5	14	19
Dyspepsia...........	1	14	21	36
Hepatic Congestion...	1	—	1	2
Tonsillitis..........	8	2	8	18
Asthma..............	2	—	—	2
Bronchitis, Acute.....	2	6	2	10
Catarrhus...........	—	5	15	20
Phthisis Pulmonalis...	4	2	3	9
Pleuritis............	1	—	—	1
Pleurodynia....	—	2	2	4
Influenza...........	—	—	7	7
Varicocele..........	—	1	—	1
Varicose Veins.......	—	2	—	2
Ulcer, Varicose.......	1	—	2	3
Cephalalgia..........	—	1	—	1
Epilepsia...........	1	—	—	1
Ictus Solis..........	1	—	5	6
Mania Temporar......	—	2	—	2
Bubo, Sympathetic....	—	1	—	1
Debilitas.....	5	9	15	29
Hæmorrhoides.... ...	5	2	7	14
Prolapsus Ani........	1	—	—	1
Enuresis............	1	—	—	1
Gonorrhœa..........	2	1	5	8
Orchitis.............	—	—	2	2
Syphilis, Primitiva....	2	—	—	2
Syphilis Consecutiva...	5	5	2	12
Condyloma Syphilitic..	—	2	1	3
Bright's Disease.......	—	—	1	1
Hydrocele...........	—	—	1	1
Lumbago............	—	—	4	4
Rheumatism, Acute...	6	9	21	36
Rheumatism, Chronic.	2	—	—	2
Synovitis of Knee with *effusion*............	—	—	1	1
Abscessus..........	2	5	6	13
Furunculus..........	6	—	—	6
Paronychia..........	1	2	—	3
Phlegmon...........	1	1	14	16
Ambustio...........	4	2	—	6
Concussion, Spinal....	—	1	—	1
Contusion..........	4	7	6	17
Fracture (compound comminuted) of Foot from railroad accident...............	—	—	1	1
Hernia, Inguinal......	—	1	—	1
Vulnus Incisum.......	8	2	2	12
Vulnus Contusum vel Laceratum.........	3	5	26	34
Vulnus Punctum (Bayonet wound of Eye).	1	—	—	1
Amaurosis...........	1	—	—	1
Ophthalmia Conjunctivæ...............	3	3	4	10
Otalgia.............	—	1	—	1
Otitis..............	1	—	—	1
Otorrhœa...........	—	1	4	5
Odontalgia..........	1	1	6	8

Total number of patients treated during three months—674.

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Amputation at the Hip-Joint.—We learn from one of the surgeons, returned from Richmond, that he witnessed two amputations at the hip-joint at Sudley's Church, during the battle of Bull Run, both of which proved fatal.

American Medical Times.

SATURDAY, SEPTEMBER 21, 1861.

CLINICAL TEACHERS AND STUDENTS.

CLINICAL teaching being, as it were, a comparatively new branch of medical education in this country, it would be strange indeed if no defects existed in its practical workings. This fact has more particular reference to the relation which should exist between teacher and pupil in order that mutual improvement may be the result. Having had occasion to allude in a general way to the advantage of bedside instruction to the student, we deem it useless to refer to it again at this time; we must not, however, lose sight in the same connexion of the benefit which the teacher may gain by virtue of his position. The teacher is not warranted in considering his labors in the hospital wards in the light of a noble sacrifice of his time and talents to the cause of medical education. He must consider that every clinical lecture which he delivers, every remark that he makes, and every fact that he notes, tends to leave an impress upon his mind, which otherwise would never have been made. The axiom, *docendo discimus*, is no less true at the present day than when first it was uttered. What teacher does not better understand a subject when he has been forced to prepare himself to lecture upon it? The learned Priestley said significantly to a friend, that he wished to understand electricity, and so he wrote a book! The good result of such a work every one can attest. By the adoption of the same principle to lecturers the result will be equally gratifying, and new trains of ideas will be constantly opening themselves before him. This being the case, and the teacher owing it all to the instrumentality of the student, the latter has a right to demand the enjoyment of certain privileges, and have the advantage of every facility that can be offered for benefiting in like manner himself. We wish to take occasion more particularly at this time to ask, if such a thing is really done? We have very good reason for supposing that it is not.

In considering in the first place the advantages offered to the student in the acquirement of knowledge, we have in the first place to notice the influence which the character of the teacher has upon him for good or evil. It is the practice of some of the attending physicians or surgeons either to shun students or else hurry through the wards with the determination to perform a disagreeable duty in the shortest possible time; another class, which belongs to the other extreme, are excessively verbose and tedious. It is questionable which of the two is capable indirectly of doing the student most harm; the one who sets an example for superficiality or he who inflicts mental as well as bodily fatigue upon his hearers. The really successful teacher is one who occupies the position of a happy medium, who by his example sharpens the student's relish for study, while at the same time he renders his mental digestion easy.

The character of the subjects touched upon should be selected with reference to the wants of the practical man, and not for the gratification of professional vanity. The suspicion of the existence of such an actuating principle ripens itself into a certainty, when we come to consider the apparent inconsistency in the teaching of some gentlemen, more especially those who practise surgery. Let us take a familiar example:—A notice is posted upon the black-boards of the different colleges to announce the performance of a capital operation in one or other of the hospitals, and a crowd of students assembles to witness it. Everything being prepared, the surgeon states that it is a case the like of which he has never seen before, and likely never expects to again, whereupon the students chronicle the important fact in their note-book, fully persuaded that one day the knowledge of it will prove useful to them. The operation then begins, the crowd of assistants almost completely surrounds the operator, while the fortunate students who may happen to occupy the front seat, elbow each other silently about to get an occasional glimpse of what is going on. Amidst this suppressed uproar and struggle the operation is proceeded with, and finally finished. The morbid mass thus removed is displayed, the whole concourse of students applaud, and then depart to discuss the skill of the operator. Every one seems satisfied except those who really came to be taught something useful. That such scenes are of common occurrence no one who has frequented our large hospitals will care to deny. The story carries its moral upon its face, and suggests the question as to whether the real wants of the student are met by such modes of teaching. In surgery, as in every other branch of medical study, the student is expected to acquaint himself with the elements of the science; the important matters which he must have a knowledge of are in reality the comparatively most trivial; and yet we meet very few surgeons who find it worth while in their clinical teachings to minister to such necessities. If the student could be taught, by actual sight (for we hold this to be the essential element of clinical teaching), the application of a bandage, the adjustment of a common fracture, the operation for hernia, the reduction of a frequent luxation, the amputation of a finger, or even the opening of an abscess, and hear some practical remarks upon the several cases, the teacher would have the gratification of knowing that he discharges the duties which belonged to his responsible position.

In the department of practical medicine and obstetrics the same faults may be found to exist, though in a less degree than in surgery. We say in a less degree, because the recital of a rare medical or surgical or obstetrical case is almost always of use to the student, as he must necessarily be essentially a physician, and may have an opportunity of seeing another such case; in surgery, however, a similar chance, no matter how strongly he may persuade himself to the contrary, may never come. It is curious to observe that notwithstanding the knowledge of practical medicine is much required by the student, he will neglect almost everything that pertains to its acquirement, if a chance is offered him to witness a surgical operation. Yet such is too frequently the case, and the physician is left to walk the wards almost unattended. Who is to blame for this? While it is the duty of the physician to give instruction in auscultation and percussion, and point out the physiognomy of disease, and while the obstetrician offers every facility for observation that he is able to, the student should also bear in mind the part which he is expected to take; the surgeon who is most careful to teach him minor points, should be more sought after than the one who has a reputation for operating, and should alike be encouraged by strict and respectful attention.

The student, for the sake of his own advancement, is expected to follow up the cases regularly, to take notes and observe everything around him, the decubitus of the patient, his diet, physiognomy, and strive by dint of practice to stamp such points upon his memory, thus cultivating a faculty for observation, without the possession of which he can never be a true physician.

The Fall is at hand; the colleges are about to commence; and ere long the wards of the hospitals will be thronged; and let us hope that the mutual relations which shall exist between pupils and teachers will result in the lasting benefit of both, and that when the services shall have closed, each may have the consciousness of doing all that was required of him.

THE WEEK.

Violent deaths from the burning of clothing are no unusual occurrence among females. During the last week, five such cases were reported at Philadelphia. The light, inflammable dress of a danseuse at a theatre took fire, the flame was communicated to others similarly clad, and the result was the almost immediate destruction of five, and more or less severe injury of several others of the troupe. Not long since, the community was shocked by the violent death of the wife of the Poet Longfellow, by conflagration of her clothing. It seems from recent experiments, that fine fabrics may be rendered non-inflammable; and this terrible tragedy, so suddenly improvised on the Philadelphia stage, should lead to a thorough trial of the methods proposed. The most gauzy material soaked in a solution of chloride of zinc becomes non-inflammable to the extent that it will not blaze, when held in a gas-light. Versmann and Oppenheim have found that a solution of tungstate of soda of twenty per cent., or of sulphate of ammonia of three per cent., produces similar results, and yet does not injure the texture or color of the fabric, or interfere with the process of ironing.

The Sanitary Commission continues to labor with great energy to extend sanitary reforms among the troops, and with great success. At a recent meeting, it added to its force the following Assistant Secretaries:—Drs. J. T. Newberry, J. H. Douglas, and J. Foster Jenkins. These are excellent appointments. Dr. Newberry is one of the members of the Commission. Dr. Douglas is well known to the profession as the able editor of the *American Medical Monthly*, of this city, and will bring to the discharge of his duties that knowledge of sanitary science, and that energy in the execution of the plans of the Commission, which are requisite to success. Dr. Jenkins, formerly of this city, but more recently a reputable practitioner at Yonkers, N. Y., enters the service thoroughly imbued with the spirit which should animate every agent of the Commission. The following distribution of duty of the Assistant Secretaries has been made:—

To Dr. Newberry, the departments of Gen. Rosencranz, Gen. Fremont, and Gen. Anderson. Post-Office address, Cleveland, Ohio. Dr. Newberry will establish hospital depots at Wheeling, Virginia (in charge of C. D. Griswold, M.D.), at Cincinnati (in charge of W. H. Mussey, M.D.), and at Quincy, Illinois.

To Dr. Douglas, the columns under Gen. Banks and Gen. Dix. Post-Office address, Baltimore, Md. Dr. Douglas will establish hospital depots at Baltimore and at Frederick City.

To Dr. Jenkins, the columns under the immediate command of Gen. McClellan and Gen. Wool, with hospital depots at Washington and Fortress Monroe. Post-Office address, Washington, D.C.

The Commission have published the following statement, which will interest those who are disposed to aid them by contributions:—

Contributions of hospital stores may be made to either of the above depots, or the Woman's Central Relief Association, No. 10 3d ave., Cooper Union, New York.

The Woman's Central Relief Association of New York is, by order of the Commission, at its own generous instance constituted an auxiliary branch of the Sanitary Commission; retaining, however, full powers to conduct its own affairs in all respects independent of the Commission, neither the Commission nor the Association being in any way responsible for any pecuniary liabilities or obligations, except such as are contracted by itself or its authorized agents.

Benevolent Societies north and east of New York, proposing to contribute supplies for the National forces, may communicate with the Woman's Central Relief Association, which will be in constant correspondence with the various Secretaries of the Commission, and will from time to time forward supplies where they may be most needed.

Contributions of money may be made to the Treasurer, Geo. T. Strong, Esq., No. 68 Wall st., New York.

In another column will be found a suggestion of much importance to the Medical Department of the Army. It is given in the paper of Dr. Haase, late Surgeon to the 5th N. Y. Reg., and is based on the practice of the surgeons in the Schleswig-Holstein war. It is the recommendation that each soldier carry about his person, when on the field, simple dressings, as bandages and lint, which the surgeon may always find at hand in cases of emergency. The British Army Medical Department have made similar provision for the troops. In a circular, issued May 27, 1855, it was directed that the following articles should form part of every British soldier's kit on active service, so as to be available at all times and in all places as a first dressing for wounds:—Bandage of fine calico, 4 yards long, 3 in. wide; fine lint, 3 in. wide, 12 in. long; folded flat and fastened by 4 pins. Such provision should be made by our authorities.

The English Government is encouraging the effort to transplant the Cinchona plant to India. The supply of quinine from South America is in danger of being so reduced by the waste and destruction of the cinchona tree, that it will fail to meet the wants of mankind. Already the price is so high that it is almost impossible for the poor to obtain it. The wise foresight of this movement of the English is most commendable. The person intrusted with this service is Mr. Clement R. Markham. The *Medical Times and Gazette* gives the following account of the success which has attended the transfer of plants and seeds:

"In India the difficulty was to find a situation provided with that incessant supply of moisture which seems indispensable for the alkaliferous plant. The search was made, however, with the light of a full knowledge of the whole conditions of the cinchona region in the other hemisphere. The first site which has been chosen is in the Neilgherry Hills at the highest available elevation that could be found south of the Himalayas. It is a wooded ravine at the back of the range of hills which rises behind the Government

Gardens at Ootacamund, sheltered, 7450 feet above the sea, with a flora analogous to that of the native forests in Peru, with an identical temperature, and a moderate supply of rain and mist during *both* monsoons. A second site has been chosen in the Neilgherries, and one at Coorg. At the first of these localities the following were, as we are informed by an authentic memorandum, the 'number and condition of the cinchona plants in the Neilgherry Hills, June 9, 1861:—

C. Calisaya (yellow bark) . .	6	(original plants)
C. Succirubra (red bark) . .	967	(463 plants, 504 seedlings) ;
C. Nitida (grey bark) . .	430	(raised from seeds)
C. Micrantha " . . .	511	
C. Peruviana (*) " . . .	280	
Total. . . .	2114 cinchona plants.	

The plants generally are in a very healthy and promising condition; some of them are in the finest possible state of health and luxuriance. The seedlings are now three inches high, and beginning to form branches. It is intended to plant them out in June, 1861, when there is every reason to expect that the stock will have increased to 60,000 cinchona plants.'"

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We have frequently called the attention of our readers to the publications of the "New Sydenham Society," of London, and urged them to become annual subscribers. The receipt of the remaining volume, for the year 1860, impresses us still more strongly with the value of this Society and its claims to support. During the two years, 1859 and '60, it has issued ten volumes including three plates of Von Hebra's Atlas of Skin Diseases. These volumes embrace the most valuable monographs, and publications inaccessible to the American practitioner, without great expense, and a knowledge of a foreign language. The annual subscription is six dollars, the value of which is obtained in the magnificent plates of Von Hebra. The Society has thus far published five volumes annually; it now proposes, if the number of subscribers is increased to 4000 (the present number being 3500), to publish three additional volumes. The deficiency should be made up in this country, and we trust every member will see that it is for his individual interest to bring the claims of the society to the attention of his neighbor. We know of no way by which an American physician can more judiciously expend money for library purposes.

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A distinguished London physician, writing to a friend in this city, thus alludes to our national struggle:—"I fear from last accounts, that we cannot expect for some time to hear that the troubles in your splendid country are terminated. I am certain that they are deplored by all men here, whose opinions and sympathy are worth having." It is gratifying to learn that the leading medical men of the parent country regard the civil war that now rends this country, as a deplorable calamity.

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Surgeon Prisoners.—We notice that the federal surgeons who were taken prisoners at the battle of Bull Run, and who did not accept a parole, have been removed from Richmond to Castle Pinckney in Charleston harbor.

Dublin Quarterly Journal of Medical Science.—Dr. Neligan, who has edited this Journal for twelve years, retired from his position with the July number, and is succeeded by Dr. George H. Kidd. We can bear the most cordial testimony to the ability with which Dr. Neligan has discharged his duties as editor. The *Dublin Quarterly* is recognised on this side of the Atlantic as one of the ablest medical periodicals in our language.

(*) A new species.

Reviews.

Researches upon the Venom of the Rattlesnake: with an Investigation of the Anatomy and Physiology of the Organs concerned. By S. Weir Mitchell, M.D., Lecturer on Physiology in the Philadelphia Medical Association. Smithsonian Contributions to Knowledge. Washington City. Published by the Smithsonian Institution. 1861. Pp. 145.

This volume contains the results of a series of observations on the habits of the rattlesnake, pursued under the auspices of the Smithsonian Institution. The favorable circumstances under which the experiments were performed, and the able assistance which was afforded the author, render the results of his studies in a high degree reliable. The work is divided into the following chapters: I. *Observations on the Crotalus when in Captivity.* II. *Anatomy of the Venom Apparatus.* III. *Physiological Mechanism of the Bite of the Crotalus.* IV. *Physical and Chemical Characters of the Venom.* V. *Toxicology of the Venom of the Crotalus.* VI. *Toxicological Action of the Venom upon Warm-blooded Animals.* VII. *Action of the Venom on the Tissues and Fluids.* VIII. *Crotalus Poisoning in Man.*

Passing over the details of experiments and observations, which occupy the first seven chapters, we shall notice only the conclusions of the author in regard to crotalus poisoning in man. The author remarks at the outset, that a careful study of the symptoms of poisoning, after the bite of venomous snakes, leads to the conclusion that whatever may be the degree of virulence in the poison, "its mode of affecting the system varies but little, whether the bite be by the viper, the copperhead, the rattlesnake, or the dreaded but not more deadly cobra. Thus, in each case, we have the local poisoning, the constitutional malady, and the possibility of inexplicably rapid death on the one hand, and of a strange zymotic disease upon the other." It is as yet doubtful if the apparent difference in the activity of the venom of various serpents is not due to the quantities formed or stored up in each case, and to the peculiarities of structure of the poison apparatus in each case. Cases of poisoning often differ as much from each other as either one of them will from the bite of the moccasin or cobra. Although there are on record a large number of reported cases of poisoning by the bite of the rattlesnake, yet they are so deficient in details, and so imperfect, that the author has been able to tabulate but sixteen. From these he deduces a series of conclusions, to some of which only can we refer. The principal constitutional effect of the poison is general, and severe prostration, attaining its maximum in one hour, and exhibited by cold sweat, nausea and vomiting, quick, rapid, and feeble pulse, anxious expression, and in a few cases with mental disturbance. Immediate death never occurs, but a series of local symptoms supervene, as swelling and discoloration of the limb and body, followed by marked symptoms of general blood-poisoning. In the most rapidly fatal case, death occurred in five hours and a half. If the case terminate favorably, "the swelling declines, and the pain disappears with a celerity which every practitioner or reporter has assumed to be evidence of his own skill, or of the utility of his therapeutic means, but which, as we shall have reason to see, is in reality an essential and most striking feature of the crotalus malady." The lesions found after death are of a negative character. The fatality of the bite may be gathered from the fact, that of these sixteen authentic cases but four proved fatal, or one-fourth of the cases. In regard to antidotes, the author concludes that, after a review of all the remedies employed, no specific has yet been discovered. The treatment should be on general principles. This malady should be treated as the symptoms dictate, and no other guide can be safely or conscientiously followed in the present condition of the therapeutics of this mode of poisoning.

Dr. Mitchell remarks, in conclusion, that his views of treatment rest upon experiments which he will detail at length on a future occasion. He urges physicians to observe more carefully cases of snake-poisoning, in order that the accumulation of a large amount of experience may determine the true value of remedies.

The essay concludes with an appendix containing "*An Enumeration* of the Genera and Species of Rattlesnakes, with Synonymy and References," by E. D. Cope; and a "Bibliography," for which the author acknowledges his indebtedness to Prof. Le Conte.

Progress of Medical Science.

ON DISLOCATIONS OF THE SHOULDER-JOINT.

Professor N. R. Smith, M.D., of the University of Maryland, communicates to the *American Journal of Medical Sciences*, a novel and efficient method of reducing this dislocation, pursued by him for some twenty years past, the success of which entitles him to confidence in recommending it to the profession.

In first reviewing the anatomical mechanism of this joint, and that of its dislocation, he says, that though classed with the ball and socket articulations, it can scarcely be said to possess a bony socket, and the capsular ligament being little else than a loose synovial capsule, contributes but little towards the security of the joint. This deficiency is supplied, however, by four powerful muscles arising from the scapular, which embrace the head, and, inserted into its base, perform the office of a powerful contractile capsular ligament, which, together with the mobility of the scapula—enabling it to accommodate its shallow glenoid to the various movements of the humerus—preserves the integrity of the joint, the coracoid and acromial processes and ligament, with the tendon of the biceps, each lending support to the bone in its peculiar direction. If the arm be violently abducted, the thin capsule is strained and ruptured below, the muscular capsule and deltoid are relaxed, and their very powerful muscles, put violently upon the stretch, draw the head of the bone into the axilla. If now the pectoral muscle is more violently stretched than the latissimus, by the humerus being driven backwards as well as outwards, the head may be dragged forward under the coracoid. In an extensive surgical practice of forty years, Prof. S. has seen but three cases of displacement upon the dorsum of the scapula, and only one was recent. A person falls forward with violence, the elbow encounters the ground, which inflicts a forcible counter-stroke in the direction of the length of the humerus. The arm is, at the same time, driven forward upon the breast, rendering tense the latissimus dorsi, the teres major, and the posterior border of the deltoid, all of which co-operate with the counter-stroke in forcing the head over the border of the glenoid backwards. The mechanism of reduction is in most respects similar to that of dislocation, muscular force being concerned in both.

The operation of reduction consists in extension, counter-extension, and manipulation; counter-extension being the mere fixing or rendering immovable the scapula; the head of the humerus alone requires to be moved. The plan recommended, is to make counter-extension from the opposite wrist, an expedient directly at variance with the commonly received principle, because remote from the bone to be supported. The continuity of ligament, bone, and tendon, by which the two scapulas are bound together, induced our author to adopt this method as the most efficient to secure the immobility of the scapula. In some of the first cases, he placed the patient in a chair, and directed two strong persons to make steady horizontal traction from the two wrists; as soon as the spasmodic resistance of the muscles was overcome, the head of the bone was disengaged, and the muscles which help us in such cases, suddenly lifted the head into its place.

This method causes no appreciable pain, but rather relieves the suffering of the patient caused by the pressure of the head of the humerus. If there be unusual muscular development, or the dislocation be of long standing, "I place the patient in a chair, sitting a little on one side of it, so as to allow room on the side of the injury for the operator's foot. I then pass a piece of stout muslin, folded, around the chest, and under the axilla of the injured side. The tails of it I carry horizontally to the opposite side, one in front, the other behind, and extending the arm horizontally, bandage them firmly to the wrist of the sound side, leaving the ends projecting, to be well secured to the wall, or other unyielding substance. I then pass an ordinary roller over the top of the injured shoulder, and back and forth, twice under the muslin band, to prevent its slipping down. Then I continue the same roller under the bottom of the chair and over the shoulder three or four times. This helps to give steadiness to the scapula, and especially to prevent the involuntary rising of the patient from the chair, or the tilting of the scapula upwards, when it is necessary to make the manipulation of which I am to speak. I now attach the extending band to the wrist of the injured side." After defending at some length this step of the operation, he concludes by directing extension to be made by two persons, outwards and a little downwards, gradually raising the arm to a little above the horizontal direction. The force may be gradually increased and continued until the muscles become fatigued and finally relaxed, when the head will often slip into its place without resort to manipulation. When this does not occur after the lapse of a reasonable time, the surgeon is to place his knee in the axilla and manipulate according to the common practice, the extension being continued. When the head is under the coracoid, the procedure is nearly the same, traction being made a little more backwards and upwards. Of dislocation upon the dorsum of the scapula, he has seen but one case so recent as to justify the attempt at reduction. In this case he failed in the method usually recommended. "I then carried a band over the front of the shoulder, one tail under the axilla, the other above it. These I united, carried them backwards and inwards obliquely, and secured them to the wall. Then I made traction strongly from the wrist almost directly forward, without much difficulty I thus drew the head of the bone forward over the margin of the glenoid, and had the satisfaction to see it slip into its place." When much resistance is expected chloroform should be freely administered until relaxation is complete; less than this causes spastic rigidity of the muscles and defeats the object.

Asclepias Syriaca.—The reputation which the Asclepias Syriaca has long enjoyed among the negroes of the South as a remedy for gleet, gonorrhœa, scrofula, etc., and the common use made of it as an ingredient in Indian cough nostrums, and other empirical preparations, induced Dr. C. I. Cleborne, U.S.N., to institute a series of experiments to determine its effects upon the system in health, the result of which he has given us in the *Am. Jour. of Med. Science.* He first took the infusion of the dried root in doses of a wineglassful t. d. for five days, which caused a slight nausea, and increased flow of pale colored urine, of a lighter sp. gr. than usual. Increasing the dose induced vomiting and ardor urinæ. An infusion of the fresh root of the same strength had the same effects, in a more marked degree, and in one-third of the dose of the infusion obtained from the dried root. Of the extract obtained by evaporating at a low temperature the expressed juice of the fresh herb, he took at first gr. iij. gradually increased to gr. v. t. d., which caused excessive nausea, tickling sensation in the fauces, and violent headache between the eyes. He next prepared a fluid extract from the dried root, of which he took gtt. x. without any peculiar effects. The same dose repeated in three hours was followed by increased secretion from the kidneys. Took gtt. xx. repeated in three hours. Same effect, with dizziness, and tickling in fauces. Took gtt. xxx. followed in three and a half hours with gtt. xx. Increase of urine, tickling at the end of penis, uneasiness of stomach, slight inclination to evacuate the bowels, severe headache, quick full pulse; symptoms continuing throughout the next day. Took gtt. xxxv. Produced nausea, inclination to evacuate the bowels, diuresis; in three hours took gtt. xv.; had copious evacuation from bowels, slight pain, pulse 98. Forty drops produced vomiting, leaving the system much relaxed, pulse feeble and frequent. Twenty drops taken with fifteen of tr. zingib. and three tr. opii, produced an evacuation, soft in consistency, and yellowish in color; appetite increased. By taking fifteen to twenty drops before breakfast, a gentle aperient effect was produced in the evening. An infusion, or decoction of the root made with water, contains a bitter taste, with very little of its active principles. The effects of every dose were marked with particular care, and he sums them up as being *tonic*, *alterative*, *diuretic*, *purgative*, *emetic in large doses*, *stimulant*, and *anthelmintic*. At no time did it act as anodyne, diaphoretic, nor expectorant. He reports several cases in which the virtues he claims for it were apparent. The dose of the hard extract is from three to five grains gradually increased.

Opium and Quinia.—The antagonistic effects of these two remedies have recently been made a subject for investigation by Dr. Nivison, of Schuyler county, New York (*Amer. Jour. Med. Sci.*), who, instead of endorsing the rule laid down by Dr. Gubler, that "they ought not to be administered simultaneously," claims that each only neutralizes the *bad effects* of the other, and that the happiest therapeutic result is often derived from their combined action. In support of this, he reviews the separate action of each, premising that no two articles enter more largely into use than the preparations of bark and opium, some of their properties being determined with a certainty that amounts to absolute demonstration, and that both have a powerful affinity for the nervous system, each impressing it in a manner peculiar to itself.

Experiments have proved that quinia given in health augments the amount of phosphates, and in disease prevents the destruction of nerve tissue. Upon the circulatory system its effects are to give contractile power to the capillaries, giving us control of almost all forms of venous and capillary congestion; to approximate the frequency of the pulsations to the healthy standard; and upon the blood, its influence is not only on the phosphates, but it diminishes the amount of uric acid, and defibrinates the fluid, which may throw some light on its action in overcoming congestion, and subduing inflammation. The action of opium is to equalize the circulation; it stimulates the nutritive or reparative process, as in the healing of old ulcers, etc.; it retards the too rapid metamorphosis of the tissues, indicating its employment in exhausting fevers, wasting discharges, etc.; not to mention its more familiar effects in removing pain, procuring sleep, etc. Although there are many exceptions to the uniform action of each of these remedies when administered singly, he claims that the number of exceptional cases will be greatly reduced when they are given simultaneously. Many acute inflammatory cases will promptly yield to the influence of full doses of opium, where these doses cannot be given without the risk of so far paralysing the nervous energies as to induce fatal congestion, which quinia will overcome by its contractile power over the capillaries. Quinia counteracts the tendency of opium to reduce the biliary and renal secretions, to reduce the respiratory action, and also obviates the unpleasant after effects which frequently follow full doses of opium. It assists opium in cases of extreme exhaustion from protracted hemorrhages, etc., by preventing undue narcotism, and by maintaining the reaction without those frequent repetitions of opium otherwise necessary. It also overcomes a large proportion of idiosyncrasies. In many diseases the dangerous congestion of some internal organ requires the contractile action of quinia on the capillaries of the congested parts; but upon trial, we sometimes find we have imparted a peculiar action to the general circulation, aggravating rather than relieving the congestions. A sufficient amount of opium controls this excitement, and diverts the circulation to the surface, thus assisting the legitimate action of the quinia. Other morbid conditions are mentioned, in which experience has demonstrated that the beneficial effects of either remedy are more readily obtained by administering the two in combination, while the unpleasant effects of either are in a like manner obviated.

Spina Bifida, treated by Iodine.—Professor Brainard reports a case of spina bifida (*American Journal of Medical Sciences*), which he treated by iodine injection. The patient was a girl aged three years. A small-sized hydrocele trocar was carried into the base of the tumor, and six ounces of fluid drawn off, pressure with the thumb at the same time being made, so as to close, as perfectly as possible, the opening in the spinal column. Half an ounce of solution made of iodine gr. v., iodid. potass. gr. xv., aq. distil. ℥j., at the temperature of the body, was injected, and after a few seconds allowed to flow out; distilled water, of the temperature of the body, was then thrown in to wash out the iodine, and two ounces of fluid first drawn from the sac, kept at the temperature of the body, were reinjected, the canula withdrawn, and pressure applied.

One injection sufficed to effect a cure. This is the seventh case which he has treated in this manner, and in no case has he seen it produce dangerous symptoms. Three of the cases were accompanied by hydrocephalus, and were all permanently cured—one with thirteen injections, one with two, and the last with one. DR. JANES.

Sanitary Commission.

FIRST REPORT OF THE HOSPITAL VISITOR FOR THE DEPARTMENT OF THE POTOMAC.

[Read before the Sanitary Commission, and by them permitted to be published in the AMERICAN MEDICAL TIMES.]

WASHINGTON, August 30, 1861.

To the Secretary of the U. S. Sanitary Commission.

SIR:—Since the 15th inst., when at your request I undertook the discharge of duty as Hospital Visitor, I have visited each day one or more of the military hospitals in Washington and vicinity, viz.:

The General Hospital, in E st. (Washington Infirmary).
The Hospital for Regulars, in C st.
The Columbian College Hospital, in 14th st.
The Hospital for Eruptive Diseases, 21st st. (Kalorama).
The Union Hotel Hospital, Georgetown.
The Sanitary Hospital, Georgetown.
The General Hospital at Alexandria, comprising a hospital for wounded only, in Washington st., and a separate establishment for diseases other than surgical in Fairfax st.

With the exception last named and the hospital for eruptive diseases, these establishments receive indiscriminately, sick and wounded, privates and officers. You have so recently been informed by the Report to the Commission of Drs. Van Buren and Agnew, as to the situation, construction, and internal arrangement of the hospitals, that details on these topics are not demanded save when changes, subsequent to the date of their report, essentially modify their statements.

Of such I may mention the provision of a separate dead-house, detached from the main edifice, at the Washington Infirmary, and at the Columbian College Hospital; the drainage of the basement at the Infirmary; and the introduction of water to each story at the Columbian College Hospital, Georgetown, the latter also having the advantage on each floor of water closets kept in good condition.

Of the structures devoted to hospital use not visited by

Drs. V. B. and A., the Hospital for Regulars, in C st., comprises two adjacent dwelling-houses, made to afford accommodation to ninety patients.

The location is bad, the sanitary condition of the neighborhood being exceptional. The wards in the basement of one building at least are damp. The ceilings, however, above the basement story are high, and ventilation by windows and doors seems to be well secured at this mild season. The entire absence of independent ventilation will render these houses unfit receptacles of the disabled when inclement weather advances.[*]

The Hospital for Eruptive Diseases has within a week been transferred to Kalorama, where it no longer endangers the safety or disturbs the peace of a populous neighborhood.[†] It occupies the spacious private mansion of —— Fletcher, Esq., surrounded by one hundred acres of wood and lawn. It has received cases of small-pox, mumps, measles, and erysipelas.

But four cases of variolous disease exist at present. These are but imperfectly isolated in a wing of the building. Patients entering the hospital with other diseases are vaccinated unless they present evidence of previous vaccination. They should be, I think, in every instance.

This hospital, like all the others, is without means of independent ventilation.

An additional building, formerly occupied by a young ladies' boarding school, has been secured at Alexandria, and opened the present week for the admission of medical cases only. It is not in as healthful a location as the surgical building, but is in construction greatly its superior. The ceilings are high and the windows large, but it suffers in common with all the buildings used as hospitals, in defective resources for ventilation, independent of the will of the inmates. It has one hundred beds, one half of which were occupied on the day of its opening.

The hospitals are now generally full, the aggregate number of inmates this week, by report of the surgeons, being 1180, nearly one half of which are cases of typhoid fever, or of remittent fever, assuming in large proportion a typhoid type. Diarrhœas and rheumatisms are much less prevalent than they were three weeks since. No erysipelas is present. The wounded are in smaller proportion, while the percentage of fevers introduced from without is steadily increasing. There is reason to expect a continuous increase of fever, for which the present hospital accommodation is utterly inadequate.

In my visits to these hospitals I have directed especial attention to matters committed by you to my notice.

The hospitals on this side of the Potomac have been continuously supplied with ice from the stock first provided by the commission, and the larger cargo (167 tons) this week placed by them at the disposal of the Medical Director, for hospital use, will afford an adequate supply through the warm season. The hospital for eruptive diseases has this week been admitted, for the first time, to participation in the enjoyment of this luxury. One surgeon reports the gift of ice as the greatest boon the Commission has been able to bestow.

Mr. Stevens, the barber, has been faithfully discharging his duty. His visits are very welcome, both to surgeons and patients. An increase in the hospital population will probably require that he should receive at least occasional assistance.[‡] He is now able to visit each hospital about once a week.

I have renewed the supply of stationery at three hospitals, and to one surgeon (Dr. Abadie) I have furnished one hundred stamps for the use of patients. I have observed that this gift of the Commission is in common use, and I think that the complaints as to its denial to patients are in general unfounded. The stock of stationery is given in one hospital to the wardmaster, in another to the head nurse; in each case the person, who, in the judgment of the surgeon in charge, will most judiciously preserve and distribute it. Guarded by this precaution against waste, it has not seemed proper to add to the burden of duties imposed on these subalterns by insisting on their keeping records, and with your permission I have not required registration of them.

I have furnished from the store-room of the Commission such hospital clothing and medical comforts not obtainable from the Medical Surgeon or the Quartermaster, as seemed necessary for the comfort of the sick. The opening of the new building of the Alexandria hospital seemed to me to present an especial claim for the cheerful bestowal of the stores entrusted to the Commission, and after the Surgeon had drawn his requisitions on Quartermaster and Medical Director, I endeavored to supplement them by an order on the Storekeeper of the Commission, unusually large. A water-bed, needed by Dr. White at the Washington Infirmary, has been borrowed in the name of the Commission from Dr. Abadie, at the Columbian College Hospital, until it can be replaced. Other surgeons have asked that a similar gift be granted to their hospitals, and to one at least the promise of such a donation seems to have been previously made.[*]

Regarding the internal administration of the hospitals, it is in general excellent. The surgeons in charge seem to have made the best of the resources at their disposal. But they are hampered by the restrictions of an inelastic system, which, framed for the needs of a small peace establishment, does not yield with sufficient readiness to the increasing demands of the service under rapid expansion.

For instance, a surgeon taking possession of a building for hospital uses finds the rooms too narrow, and being told that the Quartermaster-General will make all needed repairs, applies to him for authority to take down certain partitions not contributing to the strength of the building. But the Q. M. G., while he will repair the roof and refit the locks and improve the floors, has had framed for him a distinction between "repairs" and "internal alterations," and decides that the removal of the objectionable partitions cannot be deemed repairs, but must be forbidden as an internal alteration. So the surgeon is left alone to improve, so far as he may by extraordinary care, his typhus-fated wards.

Again, it is evident that as few demands as possible should be made on the time of the surgeon-in-charge for merely secular or clerical duties. He surely has ample employment in the discharge of duties purely professional, in the direct care of the sick, and in fulfilment of claims consequent thereon.

A law of the last Congress calls for weekly returns from each hospital of the number of sick, the name of each man, the State, the regiment, and other details pertaining to each individual, rendering the unaided preparation of each report the work of many hours. In his laudable effort at compliance with the requirements of this law, you believe that the surgeon is assisted so far as is possible by the central bureau. Not so. It furnishes him no printed blanks to be filled with the required facts, but calls on each surgeon in charge of a hospital to devote valuable time to the mere clerical duty of ruling blank sheets in manifold columns, and burdens him moreover with the duty of writing a special requisition for the paper necessary therefor, the use of which overdraws the number of quires allowed him each three months.

Whether such hindrances to the hospital surgeon arise from the want of a discretionary power as to expenditure granted by the Secretary of War to the Quartermaster-general and Surgeon-general, or are the effect of mere routine in these departments, the result for him and for the objects of his care is equally unfortunate. As to the remedy, whether it should be sought directly from the

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[*] This Hospital has since been transferred to a more suitable building in an elevated locality.

[†] It is authentically stated that variola appeared in several instances near the Hospital while it was established on Capitol Hill.

[‡] An additional barber has since been engaged.

[*] The Assistant-Surgeon who has had charge of the patient for whose relief the first water-bed was furnished, expresses the belief that its use has saved the man's life.

Secretary or from subordinate officials you best can judge. The aerial space of the hospital wards varies from 1000 cubic feet in the most favored rooms, to 700 and even 500 feet, in many which are crowded. I observe as yet no tendency to disease generated within the hospitals. Saturation of their fissured walls by organic emanations is perhaps not yet complete, and the freedom of ventilation by doors and windows which has been admissible thus far, has put off the evil day. But unless the improvement which can be introduced to these buildings at moderate cost, is effected, by securing to them ventilation independent of the control of the patients, and to the patients a large average aerial space, when frost comes will it not bring with it the scourge of dysentery, and typhus, and gangrene?

The nursing appears to be good, and the sick are generally content with the care they receive, and present a cheerful aspect.

Yours respectfully,
J. Foster Jenkins, M.D.,
Associate Secretary.

Correspondence.

DR. PETERS'S VINDICATION.

[To the Editor of the American Medical Times.]

Sir:—Absence from the city prevented me from seeing the article of *Contraria Contrariis* until shortly after that of *Timon* appeared. Hence I will answer both articles, as far as necessary, at the same time.

Both articles show signs of great vindictiveness, but *Contraria Contrariis*, according to his own principle, must oppose every thing, right or wrong; and *Timon*, I learn from Blake's Biographical Dictionary, was "*a misanthrope, born at Athens. He declared himself the enemy of the human race, and in his conduct exhibited the savage character of a man-hater.* He said he loved Alcibiades, because he would prove one day the ruin of Athens." It is perfectly evident that I must suffer from the hands of such opponents, and cannot possibly open my mouth without giving them a text to preach from. Their articles abound in so many personalities that I am obliged to make explanations, and I make them to you and the better class of the profession.

C. C. assumes I well know that "rational medicine is truly Catholic, and allows the largest liberty to all her votaries; the freest range for all the faculties, and stimulates them by all the highest and noblest motives that can operate on the human mind." This may be, and is so to a certain extent, but I deny that large and small factions of the profession allow this. In the very next sentence I am told that this Catholic institution has a special abhorrence. Of course it has, and many of them like the Englishman who was without prejudice, but did hate Jews, Jesuits, and Frenchmen, to say nothing of dissenters and tories. I will append a portion of a note to prove that I have some little claim to true Catholicism:—

My Dear Doctor Peters:—If I may without presumption express an opinion as to the professional step you have taken, I beg to say that I consider it eminently sound and judicious. The position you assume is *Catholic*, and in my judgment *impregnable*. It must commend itself to every one, lay and professional, who is not wholly given over to medical sectarianism. Of course you have foreseen and are prepared for attacks from that class who can see nothing outside their own peculiar *ism*. Several physicians have been spending the evening with me, and your communication to the Medical Times was discussed. It would be bad taste for me to repeat to you all the civil things they said about it.

Very truly yours, &c., S.

C. C. assumes that I practised blindly on the dogma similia, believing it to be absurd and opposed to reason and common sense, until it one day happened to occur to me that my dogma was only a fragment of a great law, &c. This explanation occurred to me while I was still a student of medicine in Germany, in the year 1841 or '42, after I had studied medicine three or four years in this country. I recollect the time and occasion of it distinctly. I was in Leipsig following the practice of the celebrated Dr. Noack, in the small homœopathic hospital there, and also attending the large St. Jacob's regular hospital. Dr. Noack was a liberal homœopathist, who did not use infinitesimal doses, but in all other respects adhered strictly to his system, never wittingly giving a dose of so-called allopathic medicine; the results of his practice compared favorably with that of his opponents. I saw cases of erysipelas, pneumonia, typhus fever, &c., recovering in such large proportions, that I then and for a long time supposed the treatment efficacious. Allow me to add that Noack's warmest and most intimate medical friends were **Lehmann**, who then had just published the first edition of his Physiological Chemistry, and **Hasse**, the rival of Rokitansky in Pathological Anatomy; they made chemical investigations and post-mortem examinations for Noack, and comported themselves as scientific, honest, and gentlemanly men, each earnestly seeking after truth in the direction most congenial to himself. I now believe that a large portion of what I twenty years ago supposed to be cures under Noack's treatment were merely recoveries; but that proves that nature is competent to cure many and even dangerous diseases, so that severe measures are less frequently required than was then generally supposed.

From Leipzig I went to Berlin, and remained the whole winter mainly under the teaching of the celebrated Schœnlein, who still maintains the same rank in Germany as a diagnostician and practitioner as Andral, Louis, Chomel, or Trousseau, do or did in France. I saw no homœopathic treatment in Berlin, because shortly after my arrival the small Homœopathic Hospital there, conducted by an extreme high dilution homœopathist, was closed by order of the Prussian government, as the result of the treatment in it was so unsuccessful.

From Berlin I went to Vienna, mainly to follow the treatment of the well known Dr. Fleischman in the homœopathic hospital, and the teachings of Rokitansky in pathological anatomy, and those of Skoda in diseases of the chest. According to Balfour's report to the British and Foreign Medico-Chirurgical Review, for Oct., 1846, Fleischmann lost 21 per cent. of his typhus fever cases, while Skoda, in the General Regular Hospital, lost 31 per cent. (see page 573). His treatment of fever and ague was much less successful than that of Skoda; while Fleischman lost 15 per cent. of his cases of pneumonia, Skoda lost only 6 per cent. during the three months that Dr. Balfour observed the treatment in the two hospitals, although his general average is 13·7 per cent. I have always been under the impression that the figures were reversed, &c.; at any rate, Fleischmann had 16 recoveries out of 19 cases, and most physicians would be willing to compound for that. It was in Vienna that I first came in contact with that almost expectant treatment of many diseases, commenced by Skoda, improved upon by Dietl, and now culminating with Bennett in Edinburgh. Skoda treated his cases of pneumonia without bloodletting.

On my return to New York, in 1843, I commenced the translation of Rokitansky's Pathological Anatomy; was almost immediately taken into partnership by a recent convert to homœopathy; and soon after, by the sickness of a medical friend who was pronounced consumptive, and sent to the West Indies, I was thrown into a large and influential practice among families devoted to the homœopathic treatment. I then believed this treatment was superior to any other in many cases, even severe ones, as I had seen many such recover in Noack's and Fleischmann's Hospitals; at the same time, I was getting a growing confidence in expectant treatment, and had always been strongly prejudicial against the same practice prevailing in the regular profession twenty years ago. I now believe that many cases which I supposed to be cures with Fleischmann's and Noack's treatment were merely recoveries, although he never used infinitesimal doses, but quantities of $\frac{1}{10}$th, $\frac{1}{50}$th, or $\frac{1}{100}$th of a grain or a drop, which doses are too great of some powerful medicines, and too small for some mild and almost inefficient remedies used by the homœopathists.

Skoda, I am informed, used to visit Fleischmann's hospital, and got his ideas of an expectant, or very gentle practice, from the recoveries he saw there: he was too able and experienced a physician to become a convert to the system, although he saw that it was safer than was generally supposed to depend upon mild treatment, even in some seemingly or really dangerous cases. And thus commenced that immense influence which homœopathy has exerted upon the regular practice. Allow me to add here, that the celebrated Trousseau's theory of *substitution* has grown out of homœopathy. The following note from a distinguished philanthropist who does not now use homœopathic treatment, but has had great opportunities of observing both kinds of practice, puts this cogently:

My Dear Doctor Peters:—I congratulate you upon thus courageously acting upon your convictions of duty, and I have no doubt of the wisdom of your decision, as although I am sure that homœopathy has merit in itself, and that its influence upon the regular practice has been highly beneficial, I do not think it can be safely depended upon in many classes of violent disease.

Believe me, with great regard,
Yours, &c. M.

In the same year, 1843, I published a declaration of faith in the Homœopathic Examiner, containing substantially the same views I now entertain. A reviewer, on page 287 of the 3d volume of that Journal, says: "I really have feeling for Dr. Peters on account of his position. He is not among the Allopaths, nor is he with the Homœopaths; he has taken an intermediate position, which is a striking illustration of his views of similia similibus curantur. He places this principle between *identity* and *antagonism*, and calls it *difference*," &c.

(To be continued.)

PRESSURE ON THE PERINEUM.

[To the Editor of the American Medical Times.]

Sir—In the Medical Times of August 31st, I noticed an inquiry in reference to a remark in a previous article, that "Pressure prevents fissure or tearing" of the perineum during labor. No proposition is complete, unless it be an axiom, without its explanation, and as an error of type obscured this, you will allow me to quote from the fourth line following, which should have read, "The second of these propositions is old, and of relative importance. In natural labor, it will rarely occur if no aid is offered, but does frequently happen as a result of pressure, and a pushing back of the head; thus admirably facilitating a cleft."

I used the term fissure in its generic sense, and as denoting that slight tearing, when only the mucous membrane is broken. The idea of sustaining the perineum in order to prevent laceration, is too old to need rehearsal. In fact, by most authors, this is the only reason given for the effort. I might then answer the inquiry in the Down-East way, by asking, How it is possible to sustain the perineum without pressure? There is no need of sustaining, until the intra-uterine mass presses, and then sustaining is a pressure in a somewhat different direction. The two words are consequently used by authors interchangeably. But my design was to limit, rather than enforce the idea, by making it one of three, and that conditionally, a reason for sustaining the perineum. I believe that unscientific pressure will, and very frequently does, cause laceration; but that pressure in the way heretofore designated, does tend to prevent tearing. This it does by somewhat modifying the direction of the face, by sustaining the head; thus relieving it from the power of the mere weight, and by the tendency which slight pressure always has to prevent tearing at an exposed point. The first idea is upon the principle of transferring dilatory power nearer the symphysis, where there is little danger of rupture; the second is upon the assumption, that the mere weight of the fœtal head has nothing to do with the dilatation of the external parts, but is a strain upon the perineum; and the reality of the third may be familiarly illustrated in this way:—If you will take a few ripe grapes of equal size, and after removing the stems, cause the expulsion of the pulp by force from the rear, the mode of egress is very nearly the same to all. If now, in the case of others, you place your finger ever so lightly at the lower edge, its tearing is prevented, and the rupture is larger on the upper surface. The same mechanical principle applies precisely where egress is obtained by mere dilatation. The *vis a tergo* is propelled in a modified direction. At one time, assuming myself to be wiser in my generation than former authorities, I almost entirely abandoned the sustaining of the perineum; but more extended observation and experience have fully satisfied me, that although, as a matter of routine, it may be objectionable, yet that, properly resorted to, it does tend to prevent laceration at the point at which sensible, moderate, concave pressure is made.

Yours, &c.
September 12, 1861. Ezra M. Hunt, M.D.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

Sept. 9th, 1861.

The medical haunts about College Avenue, Medical, and Ninth and Tenth streets, seem to be gradually awakening from their summer slumbers. Already a few notices are to be found on the various boards, announcing a part of the *intended* medical doings of the coming months when students are "in season." The number of special and quiz classes will be terribly decreased, and perhaps as much from the fact of the absence of these embryo professors, as from that of the students. Many of these classes, however, are but unsightly protuberances on the collegiate body, and may well be dispensed with. Your correspondent knew of many an instance where a dissipated student, having wasted his time, was in the last few weeks sufficiently "crammed" by means of these "grinders," to pass a quite creditable examination; but, the ordeal once passed, the knowledge evaporated into thin air. If no other good results to the medical world than this, this alone is of sufficient importance to cause great rejoicing in the hearts of the brethren, many of whom have long felt the stigma inflicted upon them by the yearly addition to their ranks, "with all the privileges and immunities thereunto belonging," of a host of "doctors," many of whom could scarcely *read*, much less *write* correctly, the English language, and of course utterly ignorant of the first rudiments of the tongue spoken by the great fathers of the profession. *Spero meliora.*

Since my last, death has removed from the ranks the forms of Drs. Thomas Bond and Antrim Foulke, both of whom have practised the healing art for many years in this city. Both were well known and much beloved by their associates and patrons. I shall leave their eulogy for those better acquainted with their many virtues.

It is a matter of much surprise that medical journals are so seldom found in the hands of the various members of the profession. An article is published, perhaps of great value, yet nobody has seen it, and when spoken of at the "Clubs," every one requests the loan of said journal. Why is this? It may in part be accounted for by the fact that the small amount yearly required from each subscriber, is somehow regarded as an item of expenditure not to be thought of, though twice the amount may be spent for some mere gratification of the appetite. By the way, a distinguished professor passed a high compliment upon the "Times," and wondered that Philadelphia was unable to produce something as good. Several members of the profession have had in contemplation, in conjunction with our publishing houses, to fill this void, but as they permit every little cloud that obscures the horizon to keep them from venturing forth, we may be compelled to wait some time ere medicine in her metropolis has an organ worthy of the support of her sons, and one which, by its frequent appearance, may serve to infuse some life into our almost stagnant blood.

Our Quarterly, the American Medical, and our bi-monthly, the Medico-Chirurgical Review, are of value to the profession, though neither is patronized to the extent it deserves; yet what we want is a weekly journal with short articles, furnishing the latest news, giving an account of the new remedies, and such other matters as may prove of interest to the medical reader.

Speaking of new remedies, the want is frequently felt of some method by which we could obtain a short account of their value, doses, etc., without waiting for the issue of a new edition of the Dispensatory or other ponderous tomes. Can you not supply this void? Why not devote a corner to the subject, to which one could at any moment turn for the needful information? A host of valuable agents are thus a long time in getting to the knowledge of the physician; and too often, when he does hear of them, no dose or other particular is mentioned, and thus he is compelled to forego their employment.

In the reports of our medical societies, mention is often made that "Dr. —— found so and so of great value," without a word as to his mode of using it, the dose, or anything else. Now it would cause much surprise in the minds of physicians, did they know how widely they differ in the dose and manner of giving sundry articles. One uses almost infinitesimal quantities, and fails, while another succeeds by the administration of the same article in heroic doses. Gentlemen, always give the dose, and manner of employing your remedies, and then we can be sure that we do not fail from these causes.

Yours, etc., A. M. Leon, M.D.

Army Medical Intelligence.

Surgeons of Brigades.—The following Surgeons of Brigades have been appointed by the President up to Saturday, Sept. 14:—G. H. Lyman, F. H. Hamilton, D. Prince, J. W. Freer, C. McMillan, C. O. Learny, J. G. F. Halston, J. S. Robbs, Peter Pineo, W. E. Waters, J. H. Ranch, D. McRuer, S. R. Haven, A. E. Stocker, J. Owen, W. C. Thompson, A. B. Crosby, to Gen. McClellan; H. S. Hewitt, J. H. Brinton, H. Bryant, P. W. Ellsworth, L. V. Bell, A. H. Hoff, to Gen. Fremont; J. A. Slidell, to Gen. Baker; J. C. Dalton, to Gen. Vielè; George Suckley, to Gen. Kearney; L. W. Cross, to Gen. Anderson; W. H. Church, to Gen. Burnside; R. H. Gilbert, Josiah Curtis, to Gen. Wool; J. E. Quidor, A. B. Campbell, J. V. L. Blany, Thomas Sim, O. Martin, N. R. Derby, to Gen. Hunter; W. D. Stewart, to Gen. A. Porter; James King, to Gen. McCall; T. R. Spencer, to Gen. Peck; W. D. Robinson, William Clendenin, J. G. Shumard, to Gen. Rosencranz; W. C. Strew, D. W. Hartshorn, T. H. Buch, A. P. Mayrut, Edwin Bentley, R. L. Stanford, J. D. Strawbridge, J. T. Carpenter, O. M. Bryan, F. N. Burke, S. L. Herrick, R. B. McCoy, William Varian, J. J. Craven, T. A. Perkins, not yet assigned.

Surgeons appointed by the Governor.—The following appointments of Surgeons and Assistant Surgeons have been made by Governor Curtin, of Pennsylvania:—*Surgeons*—Dr. E. W. Bailey, New Bloomfield, Pa.; Dr. N. F. Marsh, Honesdale, Pa.; Dr. Wm. H. Gobrecht, Philadelphia, Pa.; Dr. C. F. H. Campbell, Philadelphia, Pa; Dr. Samuel G. Lane, Chambersburg, Pa.; Dr. John H. Fromberger, Bristol, Bucks Co., Pa.; Dr. R. M. S. Jackson, Cresson, Cambria Co., Pa.; Dr. A. B. Meylert, Scranton, Luzerne Co., Pa.; Dr. W. S. Woods, Pittsburgh, Pa. *Assistant Surgeons*—Dr. J. H. Sheetz, Dale, Berks Co., Pa.; Dr. E. Donnelly, Philadelphia, Pa.; Dr. J. B. Finney, Harrisburg, Pa.; Dr. J. W. Lyman, Lock Haven, Pa.; Dr. J. F. Huber, Lancaster, Pa.; Dr. James R. Reilly, Harrisburg, Pa.; Dr. W. C. Rodgers, Norristown, Pa.; Dr. J. P. Vickers, West Chester, Pa.; Dr. H. S. Colson, Philadelphia, Pa.; Dr. Ambrose J. Herr, Strasburg, Pa.

HEALTH OF TROOPS ON THE POTOMAC.

[Army Correspondence of the American Medical Times.]

Alexandria (Virginia), *September* 14, 1861.

In a communication to the Medical Times I gave you some account of the wounded who retreated from the battle of Manassas, and the health of the troops in this vicinity. I now propose to continue the account of the sanitary condition of the troops who are quartered on the left wing of the army of the Potomac. The season, thus far, has been cool and wet; heavy rains have fallen, to which the men were exposed from guard and picket duty, and the severe labor in building forts and earthworks, entrenchments, and the other labors incident to camp life. The last of July, and up to the middle of August, diarrhœa, cholera morbus, and some few cases of bilious remittent fever, were quite prevalent, and muscular rheumatism, diphtheria, tonsillitis, and bronchial affections, came up after each rain storm. The type of fever was of the bilious remittent form; the attack for the most part ushered in by a slight rigor, with pain in head, back, and limbs. The pulse slightly accelerated. Skin hot but usually moist, and in many cases bathed in a profuse perspiration. Bowels usually regular, but at times a diarrhœa preceded or attended the attack. A remission, more or less marked, occurred within twelve or twenty-four hours. The tongue was almost uniformly covered with a thick brown or yellow coat, from the commencement. Great depression of spirits, and loss of muscular strength, was early manifested. If the disease was not arrested, soon the tongue would become foul, or red and dry, and the teeth and lips covered with a dark sordes; delirium would come on, sometimes of a furious character, the patients frequently rushing out of the tents in the night and running through the camp naked, until stopped by the guard. In several instances, before field hospitals were established, the patients ran out naked and barefoot in a furious rain storm, and either the rain or the cool air restoring them to consciousness, they quietly returned to their tents. In no instance did any mischief arise from such exposure. In some of the worst cases of a typhoid type, sudamina, rose-colored spots, and petechiæ were observed. If treated early with five grains of quinine once in six hours, until twenty grains had been administered, the fever was arrested, and then a mild course of tonics was sufficient to restore them.

Relapses were extremely frequent, and nothing contributed so much to them as a cathartic. The soldiers would clamor for something to "clear them out," as they termed it, and would often take sal epsom or bilious pills which they brought with them, or procured from their comrades, and the result was sure to be a relapse. In those cases where diarrhœa was a prominent symptom, pulvis opii, with hyd. cum creta, was generally sufficient to arrest it, yet quinine was indispensable; calomel was rarely prescribed in camp. The liability to relapse, on the seventh or fourteenth day from the date of convalescence, was a marked feature, and was anticipated by five grains of quinine. As a prophylactic, I have great confidence in its efficiency. We had an opportunity, especially among the officers, in testing its power.

There was one thing connected with soldiers that was to me quite a new feature. It was the effect which measles had in rendering them susceptible to attacks of fever for a long time afterwards. While in the Park Barracks, New York, a great many of our men were affected with measles, and were sent to the hospitals. In time they recovered and rejoined the regiment, apparently in good health, but in the course of the summer these men were attacked without an exception, and their cases proved the most obstinate of any under treatment, and were protracted, and all assumed a typhoid character. So also with diphtheria, the liability to relapse was common, and protracted convalescence the result. The mucous membranes of throat, mouth, stomach, and air passages, were in an irritable state, while extreme debility was an attendant. There were but few cases of genuine dysentery; none fatal, all yielded promptly to opiates, slight alteratives, and low diet. We had a few cases of cholera morbus, some quite severe, running into collapse with blue surface, spasms, and pulseless for hours, brought on by gross imprudence in eating crude vegetables, or badly cooked food. Calomel, opium pills, small bits of ice instead of liquids, mustard sinapisms to stomach and extremities, small quantities of brandy after vomiting was allayed, frictions to skin with hot flannel.

No case in our regiment proved fatal, although one man was pulseless and cold for over thirty-six hours. Nostalgia, or homesickness, was prevalent in the camps, more especially after the retreat from Manassas, and had a pernicious effect on the men. It is no wonder that soldiers, many of whom left home for the first time in their lives, should miss the society of their friends, and the home comforts which they had been accustomed to enjoy; should feel a longing desire to return, and prey on the mind and body to such an extent as to produce sickness, and when sick to aggravate and retard recovery. But after a few weeks this desire wore away, and I apprehend now there are but few who really wish to leave, and the number is daily diminishing.

The great proportion of the sick for the last few days are bilious remittent fever, with a tendency to become typhoid. Almost all of the cases west of Alexandria are sent to the hospitals here, where they are well cared for. There are about 120 in Fairfax street, and about the same number in the Washington Street Hospital. These are exclusive of surgical cases. There have been but few deaths thus far. Those camps that are situated on the low grounds adjoining the river or inlets are more affected than others. There is no doubt that the origin of fever here is malaria. Cleanliness in and about the camps has a wonderful effect in preventing sickness, and where the police is the most rigid there you find the least sickness. Since the order prohibiting sutlers from selling liquors, there has been less sickness than before; for although they have not at any time sold to non-commissioned officers and privates, yet wherever liquor is sold, it is sure to get into the hands of those who want it most, and its pernicious effects are at once seen.

After the soldier is paid we notice an increase of the number of sick. This arises from five causes. The drinking which attends his having money to purchase liquor with, and his eating improper food, green fruits, and pies and cakes and such other things that are pernicious. There are times I have no doubt but a judicious use of spirits is good, and if the soldier could take it at the right time and in the proper quantity, there is no doubt of its being a benefit. But it happens that the soldier believes he requires it nearly every hour in the day, and would be unfit for duty all the time, and most generally ready for acts of insubordination or he lies in the guard-house most of his time. This great and magnificent army that now lies so quiet and orderly on the banks of the Potomac, that is so easily governed, and in such excellent health to-day, would be sick, mutinous, and disorganized within one month from this, if an unlimited supply of ardent spirits were to be bought by the soldier.

A soldier will do any act to get liquor, especially after getting one drink. He will pay all the money he has, from fifty cents to one dollar, and even more, if he cannot get it without. He will desert his camp, forge a pass, run the guards, and when outside the camp will not stop until he gets beastly drunk; will lie down on the ground and expose his health and life, and be arrested, carried back to camp, put in the guard-house, be punished and disgraced, and close up by being on the sick list for a long time for the privilege of drinking bad liquor.

The soldier thinks it a great hardship to stand guard, or work in the trenches, or drill, or cook, or do any of the necessary labors of the camp; but it is no hardship for him to go off and get drunk, and take all the penalties of a regular debauch, because he does it voluntarily. He had far better be kept at work; it contributes to his happiness, to his efficacy, and his usefulness.

The suppression of intemperance in the army is one of the most herculean of labors. Martial and civil enactments, stringent orders, a vigilant police, all fail in preventing it. The greater the obstacles to be overcome, the greater ingenuity in finding means for obtaining it. Of all the evils attending the life of a soldier—and there are from the nature of the service many—none are so fruitful in bad results as the use of intoxicating liquor. Most of the accidents in camps arise from it. Murders, assassinations, mutinies, and quarrels have their origin directly or indirectly in intemperance.

There is no safety to the orderly and temperate where intoxicated men are about, and they should be placed under guard at once, whether quiet or noisy, if found to have been drinking. Bad as it is for the non-commissioned officer and private to drink too much, it is still worse for the man who wears shoulder straps, and by his example should lead in the work of reform. The private, when remonstrated with, says, "Why, my captain or lieutenant drinks, why cannot I do the same?" How the evil is to be suppressed I know not.

A. B. Shipman,
Med. Staff 17th Reg. N. Y. V.

Medical News.

Death of Prof. Quekett.—This distinguished surgeon died on the 20th of August. He was the author of a learned work on Histology, and for a time Conservator of the Museum of the College of Surgeons, London.

Physical Training.—Among the Parliamentary Papers recently issued, are two small volumes containing some information collected by Mr. Edwin Chadwick during the recent education inquiry. Mr. Chadwick shows in these papers that the present practice of long hours of teaching is a wide cause of enervation and predisposition to disease, and induces also habits of listlessness and dawdling. The half-time system is found to give nearly, if not quite, as good education as the whole time; and common sense tells us that a boy who has acquired the same amount of knowledge in half the time of another boy, must have obtained a proportionately superior habit of mental activity. It is this alertness, combined with the bodily aptitudes created by drill, that gives the comparatively stunted boys of the town a preference over the strong robust lads from the coast. Good schoolmasters say that about three hours a day are as long as a bright, voluntary attention on the part of children can be secured, and that in that period they may be really taught as much as they can receive; all beyond the profitable limit is waste.—*Medical Times and Gazette.*

Statistics of Resection.—The following statistics are from Dr. Heyfelder's recent work on resections:—"Resection of the hip-joint has been performed in 71 cases, the first operator being Anthony White, in 1815, and the results being 33 deaths, 33 cures, and 5 unknown; total resection of the knee-joint in 183 cases, the first operator being Filkin, of Northwich, in 1762, the results being 54 deaths, 125 cures, and 4 unknown; partial resection of the knee-joint in 36 cases, the results being 16 deaths and 20 cures; total resection of the foot-joint in 22 cases, amongst which are 3 deaths and 19 cures; partial resection of the same in 77 cases (8 deaths and 69 cures); resection of the astragalus in 67 cases (9 deaths and 58 cures), Fab. Hildanus being the first operator, in 1670; resections of the calcaneous in 84 cases (1 death and 83 cures), the first operator being Fornisus, in 1669, etc. Concerning the resections of the upper extremities, we find amongst others 288 cases of resection of the elbow-joint (32 deaths, 220 cures, 6 doubtful, 17 partially successful, and 13 failures). Altogether, 2662 resections have been made; the results are known of 2241 cases; there have been 452 deaths and 1616 complete cures; in 1789 cases the life has been saved; 173 cases have been unsuccessful; and of 421 the result is not known."

Edinburgh Medical Journal.—Messrs. Oliver and Boyd have purchased this Journal for £850.

American Medical Times.

SATURDAY, SEPTEMBER 28, 1861.

ADDRESS TO MEDICAL STUDENTS.

There is not a medical student who, at the commencement of his career, has not confidently expected that he would one day take an honorable and distinguished position in the profession of his choice, and yet it is notoriously the fact, that very few realize such anticipations. The explanation of all this is simply that the young aspirant does not sufficiently appreciate the position in which he is placed, and does not deem it necessary to sit down and count the cost before he takes steps to build.

In this number, which is especially devoted to the educational interests of the medical profession, we propose to discuss a few points which have reference to the plan of study which the student should pursue, in order to improve the numerous advantages which are now rendered available.

In the first place, we cannot too strongly urge the necessity of a habit of close application to study, as the only guarantee of future success. In relation to the medical student this advice is particularly applicable, inasmuch as so many temptations are set before him, to which he is too apt to yield, especially in large cities, not only on account of his necessary associations, but particularly in consequence of the absence of all restraints on the part of his teachers. The parental relations, which the teacher holds to the pupil in literary institutions, are lost in medical colleges. In the latter, the student has attained an age which entitles him to be treated by the professors as a man, and in very many respects as their equal. Hence, all the control which can be exercised over the student is wholly self-imposed, and necessarily more or less defective, according to the individual decision of character.

It is expected of every student to exercise an independent will, to think for himself, and rely as much upon his own efforts as upon those of his teacher. The seed is furnished him, and he must keep the ground in a proper condition to receive it.

The peculiar plan of study in our medical colleges is such as to require the closest attention on the part of the student to his duties. Of the importance of application no one can doubt, who considers the ground that must be passed over in comparatively a very short time. Although it must be admitted that too much is required of the student in a given time, yet such is the course of study, and the period fixed for its acquirement by the common consent of our colleges. He only can be considered a thorough student who makes every exertion towards the acquisition of the required knowledge which is consistent with health. The great error which most students commit is, in putting off the study of this or that subject to a season which they imagine will better suit their convenience. But the anticipated leisure seldom or never comes, and, too often, even the opportunity of acquiring a knowledge of a given branch of study is lost for ever. The resolves which the pupil has formed from time to time, and not fulfilled, rapidly accumulate, and too soon weigh down his ambition. He then gradually becomes indifferent to the most potent advantages around him, and finally, perhaps, disgusted with the science of medicine, simply because of the defect in his method of study. Let the student, therefore, act upon this suggestion:—No opportunity is as good as the first which presents itself, and he will improve with the greatest rapidity who takes timely advantage of it.

Not only should the student begin with the determination to work hard, and work in the proper time; but he should, at the very commencement, arrange for himself a certain method which it should be his endeavor to pursue as far as practicable. By this means he renders his task less irksome, and allows himself more time for the satisfactory performance of every duty.

In attendance upon lectures he should be punctual at the appointed hour, sedulously attentive to the instructions of the Professor, and maintain a gentlemanly deportment. This is not only conducive to his success as a student, but is due to his own self-respect, and is an encouragement equally to his classmates and the lecturer. The practice of note-taking is one which commends itself to every student, on account of the many advantages that attend its adoption. It has a decided advantage not only in impressing facts upon the mind, but tends to cultivate a habit of close attention. By this means also many useful hints are carefully garnered which cannot be preserved in any other way. Another advantage of note-taking consists in the adoption of the comprehensive arrangement of the subject which is made by the teacher with reference to the special wants of the student. This alone is sufficient to recommend the practice.

The fundamental principles of the science of medicine, as embodied in Anatomy, Chemistry, and Physiology, should first call for *most* particular attention. Having laid the necessary foundation by such studies, the student is then, and not until then, properly prepared for his visits to the Hospitals, and the attendance upon the College clinics. This latter branch of study is one which he should cultivate above all the others, for by no other way than by actual observation can disease be studied. No impressions are so lasting as those made upon the mind through the senses. Not only is the attendance upon clinics of value in fixing upon the mind the general characters of disease, but it tends to develop the faculty for observation, which in its turn rewards its possessor by constant new discoveries in the science of disease. It is the greater or less development of this faculty that constitutes the difference between different practitioners. One from early study sees every point in a case as if by instinct; the other passes almost every important feature by, and wonders not so much at his own stupidity, as at his brother's sagacity. It was the possession and cultivation of this habit that gave to the medical world such names as Harvey, Bright, and Jenner. Let the student be encouraged by such bright examples, and be assured that the field for scientific observation is still open to him with as much hope of success as in times long gone by. No one dreamt of the true course of the blood until Harvey demonstrated it, nor of the existence of a common disease of the kidney, until Dr. Bright pointed it out; and yet have we any reason to suppose that before this the blood ran but one course, or that Bright's disease was less common? New discoveries of equal importance still remain to be made; and numerous morbid processes, now wholly overlooked, are lying in wait for some future philosopher to investigate and explain.

In reference to text books, the fewer that the student can get along with the better. Standard works should always be chosen, and one in each branch is amply sufficient; while, on the contrary, miscellaneous reading almost invariably tends to confuse the mind and render the knowledge at best superficial. No time is in general allowed, during pupillage, for the study of any specialty; the student learns only first principles, and these he can gain from a few necessary books. One of the requirements for admission into a medical college is, that the student shall be provided with a preceptor. But, during the lecture term, the pupil and preceptor are liable to be separated. This is the case with those students from the country, and is a strong argument in favor of their attendance upon the private classes which exist in the vicinity of colleges. Many of these are ably conducted, and merit the confidence of students. The advantages of a thorough course of examinations by a competent instructor during the lecture term, are so evident, that we need not further allude to them.

The medical student, attending to all his duties in the lecture-room, the dissecting-room, the wards of the hospital, the dead house, and at home, has indeed no more time to rest than can be spared for the preservation of his health of mind and body. He must not even content himself with the reflection, that after his college course is finished, and the long wished for diploma obtained, his education is complete. On the contrary, let him regard his present studies as merely the preliminary training which shall qualify him for the prosecution of a student's course through the rest of his life. Animated by such just and comprehensive views of the science of medicine, success in life is a certainty. At every advance new encouragements will spring up to urge him still onwards, and in due time he will meet with the rich reward of honor from his profession, and patronage from the community. Within the last year the field of practical medicine and surgery has been largely extended in this country. The civil war that has so suddenly involved the nation, has made an appeal to our profession for which we were totally unprepared. Military medicine and surgery have been known to us only traditionally; hereafter they are to become a branch of special study. Whatever may be the issue of the war, no one can doubt that military science, in every department, will now largely occupy the attention of the American mind. The medical element of our military organizations will receive a corresponding share of attention. Thus a new and important branch of public service will be opened for our profession, which will demand the earnest and life-long labors of large numbers of medical men. Already the draft upon the ranks of civil practitioners is so great that there is an urgent need of recruits to supply the vacant places.

At no period in our medical history have there been greater inducements for qualified students to enter upon the study of medicine. The cry that physicians are becoming too numerous, is true only in the sense that too many are by education and natural capacity entirely unfit for practice. The demand for educated medical men is urgent, and no student who brings to the study of medicine proper mental, moral, and educational qualifications, and a resolve to take high rank in his profession, need have any doubts concerning the wisdom of his choice.

MEDICAL COLLEGES OF THE UNITED STATES.

Session 1861–62.

In presenting to the Students and Profession our annual list of Medical Colleges, we regret to say that it is necessarily incomplete, on account of the civil war, which cuts off all our communication with the Southern States. We have accordingly given the Northern Colleges more space than formerly, quoting, for the most part, the language of the circulars.

CALIFORNIA.

UNIVERSITY OF THE PACIFIC.—MEDICAL DEPARTMENT.—SAN FRANCISCO.

J. Morison, M.D.. Prof. of Path. and Pract. Med.
Isaac Rowell, M.D., Prof. of Chemistry.
L. C. Lane, M.D., Prof. of Physiology.
E. S. Cooper, M.D., Prof. of Anatomy and Surgery.
Henry Gibbons, M.D., Prof. of Mat. Med.
Hon. Geo. Barstow, Prof. of Med. Jurisprud.

The fourth regular annual course will commence on the first Monday in November, and continue eighteen weeks; clinical lectures will also be given on Wednesday and Saturday of each week.

Graduation.—The Examinations will be so arranged as to permit the Commencement for conferring Degrees to be held early in March. The candidate must be of good moral character, and at least twenty-one years of age. He must have attended two full courses of lectures in some regular and recognised medical school, one of which shall have been in this college, and he must exhibit his tickets or other sufficient evidence thereof to the Dean of the Faculty. He must have studied medicine for not less than three years, and attended at least one course of clinical instruction in an institution approved by the Faculty. He must present to the Dean of the Faculty a thesis or dissertation upon some medical subject, in his own hand-writing, and of his own composition; and exhibit to the Faculty, at his examination, satisfactory evidence of his professional attainments. The degree will not be conferred upon any candidate who absents himself from the public Commencement, without the special permission of the Faculty.

Fees.—The fee to each Professor is $20, payable in advance. The Matriculation fee is $5: *to be paid but once.* The graduation fee is $50.

Beneficiaries.—For the purpose of assisting meritorious young men, the Faculty will receive, annually, a limited number of beneficiaries, who will be required to pay $50 each, towards the support of the institution, together with the Matriculation fee.

Those who are desirous of availing themselves of this foundation, must present to the Dean of the Faculty, as early as possible, satisfactory evidence, showing them to be of good moral character and of appropriate elementary education, and so circumstanced as to *require* this assistance.

CONNECTICUT.

MEDICAL INSTITUTION OF YALE COLLEGE, NEW HAVEN.

Rev. Theodore D. Woolsey, D.D., LL.D., President.
Benjamin Silliman, M.D., LL.D., Prof. Emeritus of Chemistry, etc.
Eli Ives, M.D., Prof. Emeritus of Materia Medica.
Jonathan Knight, M.D., Prof. of Surgery.
Charles Hooker, M.D., Prof. of Anatomy.
Worthington Hooker, M.D., Prof. of Medicine.
Benjamin Silliman, Jr., M.D., Prof. of Chemistry.
Pliny A. Jewett, M.D., Prof. of Obstetrics,
Charles A. Lindsley, M.D., Prof. of Materia Medica and Therapeutics.

The forty-eighth annual course of lectures in this Institution commenced on the 12th day of September, 1861, and continues *sixteen* weeks. The examination for degrees will be held immediately after the close of the lecture term. The new College building is centrally situated, being about midway between the Academical College and the State Hospital. The lecture rooms are spacious, convenient, and well ventilated. The Museum is well supplied with both natural and morbid specimens, together with a large collection of casts, models, and plates.

The anatomical museum, the cabinet of materia medica, the cabinet of minerals, and the libraries of the medical and anatomical departments are all open to students. In connexion with the course of lectures on anatomy and physiology, instructions will be given in Microscopic Anatomy by M. C. White, M.D. A large and valuable collection of specimens, both natural and morbid, will be used in illustrating this course. A limited number of students can receive instruction in the use of the microscope if desired.

Graduation.—The requirements for graduation are:—For graduates of College, two years' study, and the attendance on two courses of lectures in this or some other regularly organized medical college. For those who are not graduates, three years' study, and the attendance on two courses of lectures. The regular examinations are held at the close of the lecture term, and also by adjournment the day before commencement in Yale College, provided there are applications for examination. Certificates are required from some regular practitioner of medicine, that the candidate is twenty-one years of age, possesses a good moral character, and that he has pursued the study of medicine the required time. At the examination, candidates must furnish a thesis on some subject connected with medical or surgical science. The material for dissection is abundant, and furnished at a reasonable charge. A clinique is held at the State Hospital once a week during the lecture term.

Fees.—The fees for the lectures, which are required in advance, are $12 50 for each course, except that on Obstetrics, which is $6. Total, $68.50; Matriculation, $5 extra. Graduation fee, $15. Private recitations are held for such as desire them, daily. The instructors are W. Hooker, M.D., C. A. Lindsley, M.D., and L. J. Sanford, M.D. The year is divided into two terms. The first corresponds with the course of lectures in the Medical Institution. The second begins in the middle of February and extends to commencement, having a vacation of two weeks in the first part of May. Fees, for the first term, $10; fees, for the second term, $40.

ILLINOIS.

RUSH MEDICAL COLLEGE, CHICAGO.

Daniel Brainard, M.D., President, Professor of Surgery.
James V. Z. Blaney, M.D., Prof. of Chemistry and Pharm.
J. Adams Allen, M.D., Professor of Principles and Practice of Medicine and Clinical Medicine.
J. W. Freer, M.D., Prof. Physiology and Surg. Pathology.
De Laskie Miller, M.D., Professor of Obstetrics and Diseases of Women and Children.
Ephraim Ingals, M.D., Professor of Materia Medica and Medical Jurisprudence.
R. L. Rea, M.D., Secretary, Professor of Anatomy.
Edwin Powell, M.D., Demonstrator of Anatomy.

The Nineteenth Annual Session will commence the ensuing October. The Preliminary Course will be opened upon Wednesday, October 2d; and the Regular Session, Wednesday, October 16th.

Clinical Instruction.—The hospitals of the city, and the numerously attended cliniques at the College, afford large facilities for practical study of many varieties of disease. The weekly and semi-weekly cliniques are attended by a constantly increasing number of patients, both in the medical and surgical departments, and the list of diseases and operations has afforded many rare and interesting cases for inspection.

Practical Anatomy.—The Faculty are borne out by the facts in stating that nowhere in the Union can greater facilities be extended. The *matériel* can be furnished to students in abundance, at as low rates as at any institution in the country.

Graduation.—The following are the requisitions for the degree of Doctor of Medicine, viz. The candidate must be twenty-one years of age, and give satisfactory evidence of possessing a good moral character. He must have pursued the study of medicine three years, and attended at least two courses of lectures, one of which must be in this institution. Four years of regular and continued practice will be considered equivalent to one course of lectures. He must have attended clinical instruction during, at least, one college term. He must have been engaged in at least one course of practical anatomy. He must notify the Secretary of the Faculty of his intention to become a candidate, and deliver to him a thesis on some medical subject, written by himself, on or before the first of February, and at the same time deposit the graduation fee, which, together with the thesis, will be returned to him in case of withdrawal or rejection. Every candidate must undergo a full and satisfactory examination on all branches taught in the college. Graduates of other respectable schools of medicine will be entitled to an *ad eundem* degree, by passing a satisfactory examination, paying the graduation fee, and giving evidence of a good *moral and professional* character.

Fees.—Lecture Fees, for the Course, $40; Matriculation Fee, $5; Dissecting Ticket, $5; Hospital Tickets (each), $5; Graduation Fee, $20. The Lecture Fees must be paid in advance by all, except those who have previously attended two full courses, one of which has been in this institution. The alumni of this, and the graduates of other respectable colleges, will be permitted to attend the whole or any part of the course of lectures, by calling on the Secretary and procuring the matriculation ticket.

MEDICAL DEPARTMENT OF LIND UNIVERSITY, CHICAGO.

David Rutter, M.D., Emeritus Professor of Obstetrics.
T. Deville, M.D., Emeritus Professor of Anatomy.
J. H. Hollister, M.D., Professor of Descriptive Anatomy.
H. A. Johnson, M.D., Prof. of Physiology and Histology.
A. L. McArthur, M.D., Professor of Materia Medica.
M. K. Taylor, M.D., Professor of General Pathology, etc.
F. Mahla, Ph. D., Professor of Inorganic Chemistry.
Edmund Andrews, M.D., Professor of Surgery.
Ralph N. Isham, M.D., Professor of Surgical Anatomy.
W. H. Byford, M.D., Professor of Obstetrics and Diseases of Women and Children.
N. S. Davis, M.D., Professor of Practice of Medicine.
F. Mahla, Ph. D., Prof. of Organic Chem. and Toxicology.
H. G. Spafford, Esq., Professor of Medical Jurisprudence.
Horace Wardner, M.D., Demonstrator of Anatomy.

Medical instruction in this institution continues throughout the entire year; and is divided into a Winter and a Summer Term.

Winter Term.—The Winter Term, which constitutes the regular Annual Lecture Season, commences on the Second Monday in October, and continues until the First Tuesday in March following. It embraces full courses of lectures on the following branches, viz.

Descriptive Anatomy; Inorganic Chemistry; Materia Medica; Physiology and Histology; Pathology and Public Hygiene; Organic Chemistry and Toxicology; Surgical Anatomy and Operations of Surgery; Medical Jurisprudence; Principles and Practice of Medicine; Principles and Practice of Surgery; Obstetrics and Diseases of Women and Children; together with courses on Clinical Medicine and Clinical Surgery, in the Hospital, and Practical Anatomy in the Dissecting Room.

Junior and Senior Classes.—The several branches enumerated, are divided into two groups. The first five named, with Practical Anatomy, constitute the first group; and the Lectures on those branches constitute the *Junior Course.* The remaining branches are embraced in the second group, and the Lectures on them constitute the *Senior Course.*

Fees.—Lecture Fees for the Winter Term, $50; Graduation Fee, $20; Matriculation Fee, $5; Dissecting Ticket, $5; Hospital Ticket, $6. All Fees are payable in advance.

Graduation.—Each candidate for graduation must furnish satisfactory certificates of having pursued the study of medicine and surgery three years, including the time of attendance on lectures; of being twenty-one years of age, and possessed of a good moral character. He must have attended two full courses of Lectures, one in the Junior and one in the Senior Departments. Or, if he has attended one full course in any other Medical College in good standing in the profession, he may be eligible to graduation by attending *one* full course in the Senior Department of this institution. He must also have attended to practical anatomy by dissections, and to hospital clinical instruction during one term. Each candidate must deposit with the Treasurer of the Faculty a thesis on some medical subject, written by himself, together with the graduation fee, on or before the first day of February in each term. Both will be returned in all cases in which, from any cause, the candidate fails to obtain the diploma. Each candidate must undergo a thorough and satisfactory examination in all the branches of medical science, except such as have been examined on, at the close of a preceding Junior course; such examinations to take place during the last ten days of each annual course in the Senior Department.

Clinical Advantages.—Clinical instruction in Medicine and Surgery constitutes an important part of the Senior Course in this institution.

The Hospital of the Sisters of Mercy, located on Wabash Avenue, near Van Buren street, is open for clinical instruction every morning in the week, throughout the Winter Term. Prof. E. Andrews has charge of the Surgical Wards, and will give a Surgical Clinic on Tuesday and Friday mornings of each week. Prof. N. S. Davis has charge of the Medical Wards, and will give clinical instruction at the bed-side of the sick every Monday, Wednesday, Thursday, and Saturday morning. Care is taken to render the instruction, in this department, as thorough and practical as possible, each student being well drilled in the practice of Auscultation, Percussion, and other special means of diagnosis.

The Chicago City Dispensary occupies a room in immediate connexion with the College, and is attended by Professors Andrews, Byford, and Wardner. More than 3,000 patients were prescribed for and treated in this Dispensary during the year 1860. On patients selected from the Dispensary, Prof. Andrews will give a Surgical Clinic in the lecture room of the College every Wednesday; and Prof. Byford will give a Clinic on Diseases of Women and Children every Saturday.

Summer Term.—The Summer term of Instruction will commence on the second Monday in March, and continue until the first Monday of October. The mode of instruction will be that of recitations and familiar explanatory lectures, on all the branches usually taught in the medical schools, together with dissections, and clinics both in the Hospital and Dispensary.

The course will be so arranged, that the class will have one examination and one lecture; and one clinic, either at the Hospital or the Dispensary, every day. The dissecting room will be supplied with all the material wanted for dissections, under the charge of the Demonstrator of Anatomy. The Professor of Obstetrics will also be able to furnish each member of the class, one or more cases of labor to attend at the residence of the patient. Attendance on the above named *Summer* Course will be *free.*

Museum, etc.—The entire Anatomical Collection, brought from Paris, by Prof. Deville, was purchased last summer, and permanently secured to this Department of the University. A very extensive and valuable series of Pathological Plates was donated by Prof. Byford and Dr. S. C. Blake. These, together with the Anatomical, Surgical, and Pathological Preparations, contributed by the Professors of Anatomy, Surgery, and Practical Medicine, fill the Museum Room quite full, and afford ample means for illustrating the several courses of lectures.

The Chemical Laboratory is supplied with a well selected apparatus, abundantly sufficient for illustrating full courses of lectures, on both inorganic and organic Chemistry.

Library.—During the past year, a Medical Library has been provided, containing about 700 volumes, embracing many very valuable works. Such regulations have been adopted as to render all books in the Library accessible to the matriculated students of the College.

IOWA.

IOWA STATE UNIVERSITY—MEDICAL DEPARTMENT—KEOKUK.

D. L. McGugin, M.D., Phys., Path., and Clinical Medicine.
Freeman Knowles, M.D., Obstetrics and Gen. Therapeutics.
J. C. Hughes, M.D., Surgery and Clinical Surgery.
Philip Harvey, M.D., Medicine and Microscopy.
(Vacancy), Chemistry and Materia Medica.
John W. Bond, M.D., Anatomy.
Henry Strong, A.M., Medical Jurisprudence.
D. C. Dewey, M.D., Demonstrator.

The twelfth regular Course of Instruction will open on the first of November next, and continue until the following March, six Lectures daily.

Regulations.—Each Student is required, within one week after the opening of the session, to pay the fees, and procure his Matriculation Ticket. Candidates for Graduation, 1st. Must be twenty-one years of age, and present testimonials of good moral character. 2d. Must have attended two full courses of medical lectures, the last at the Medical Department of the Iowa University, or evidence of four years' respectable practice will be considered as equivalent to one course. 3d. Must have studied medicine three years (including lecture terms), under the direction of a respectable medical practitioner. 4th. Must furnish a satisfactory medical thesis (original and in his own handwriting) to be delivered to the Dean, at least four weeks before the close of session, accompanied by the receipt of Treasurer.

Clinical Instruction—College Infirmary.—This, in immediate connexion with the College building, and under the direction of the Faculty, is capable of accommodating one hundred patients. The cases here presented for advice and operation, by the professors of Clinical Medicine and Surgery, form one of the important features in this Institution, and every student may equally enjoy its advantages free of charge.

County Alms-House.—This Institution, in the vicinity of the city, will be open once each week for the admission of Students, where they have opportunities of observing disease in all its chronic forms.

Fees.—Fee for the entire Course of Instruction, $15; Matriculation Ticket, $5; Demonstrator's Ticket (optional), $5; Hospital Tickets, *gratuitous;* Graduation fee, $30.

KANSAS.

BAKER UNIVERSITY—MEDICAL DEPARTMENT—LEAVENWORTH CITY, KANSAS.

J. F. Smith, M.D., Anatomy.
———————— Practice of Medicine.
M. S. Thomas, M.D., Principles of Surgery.
H. Griffin, M.D., Materia Medica and Therapeutics.
F. Sinks, M.D., Chemistry and Toxicology.
G. W. Hogeboom, M.D., Med. Jurisp. and Sanitary Science.
J. L. Weaner, M.D., Clinical and Op. Surgery.
C. J. Lee, M.D., Clinical Medicine.
C. A. Logan, M.D., Obstetrics.

KENTUCKY.*

UNIVERSITY OF LOUISVILLE—MEDICAL DEPARTMENT—LOUISVILLE.

Benjamin R. Palmer, M.D., Surgery.
J. Lawrence Smith, M.D., Medical Chemistry.
Robert J. Breckenridge, M.D., Mat. Med. and Therapeutics.
Joshua B. Flint, M.D., Clinical Surgery.
Theodore S. Bell, M.D., Theory and Practice of Medicine.
Llewellyn Powell, M.D., Obstetric Medicine.
J. W. Benson, M.D., Anatomy and General Physiology.
S. M. Bemiss, M.D., Med. Jurisprudence and San. Science.
D. W. Yandell, M.D., Clinical Med. and Path. Anatomy.
Archie B. Cook, M.D., Demonstrator of Anatomy.

Clinical Instruction.—Three clinics are held weekly in the Amphitheatre of the University, a surgical clinic on Saturday, by Prof. Palmer, and two medical clinics weekly, by Prof. Yandell.

Graduation.—1. The candidate for the degree of *Doctor of Medicine* must have attained the age of twenty-one years, and sustain a good moral character. 2. He must have attended two complete courses of lectures, the last of which shall have been in this institution. 3. He must also have taken the ticket of the demonstrator one session, or been engaged in dissections under a competent teacher; and must have attended one course of clinical instruction in the Louisville Marine Hospital, or some other institution approved by the Faculty. 4. Students who have attended a full course of lectures in a respectable medical school, and physicians who have been engaged for four years or more, in reputable practice after a regular course of study under a preceptor, are admitted to examination in this school after attendance upon one complete course. 5. Candidates, at the time of applying to the dean for admission, are required to exhibit their tickets as proof of their compliance with the above rules, and to produce a thesis on some medical subject composed by themselves. In event of withdrawal or rejection, the thesis and graduation fee will be returned to the candidate. 6. The voting on the case of each candidate is by private ballot, and if there be three negative votes, he will be rejected, the Professors of Clinical Surgery, Medical Jurisprudence, and Sanitary Science not voting.

Fees.—The fee for admission to the entire course of lectures is one hundred and five dollars, payable, as are all the fees, in advance. The matriculation ticket gives the student the use of the extensive library of the institution during the winter, and is five dollars. The graduation fee is twenty-five dollars. The fee for admission to the dissecting-rooms and for instruction by the Demonstrator of Anatomy, is ten dollars.

KENTUCKY SCHOOL OF MEDICINE.

Benjamin W. Dudley, Emeritus Professor.
H. M. Bullitt, Theory and Practice of Medicine.
John Hardin, Obstetrics and Clinical Medicine.
C. W. Wright, Medical Chemistry.
N. B. Marshall, Materia Medica and Therapeutics.
Middleton Goldsmith, Surgery and Clinical Surgery.
W. D. Stirman, Anatomy.
George W. Bayless, Physiology and Pathological Anatomy.
David Cummins, Demonstrator of Anatomy.

TRANSYLVANIA UNIVERSITY—MEDICAL DEPARTMENT—LEXINGTON.

Benjamin W. Dudley, M.D., Emeritus Prof.
Robert Peter, M.D., Chemistry and Pharmacy.
James M. Bush, M.D., Anatomy.
William S. Chipley, M.D., Theory and Practice of Medicine.
Ethelbert L. Dudley, M.D., Principles and Prac. of Surgery.
Samuel M. Letcher, M.D., Obstetrics and Dis. of Women.
Henry M. Skillman, M.D., Gen. and Path. Anat. and Phys.
Benjamin P. Drake, M.D., Mat. Med., Med. Juris. and The.
Samuel L. Adams, M.D. Demonstrator.

MAINE.

MEDICAL SCHOOL OF MAINE, AT BOWDOIN COLLEGE—BRUNSWICK.

Leonard Woods, D.D., President of the College.
Israel T. Dana, M.D., Prof. of the Theory and Prac. of Med.
Amos Nourse, M.D., Prof. of Obstetrics.
John S. Tenney, LL.D., Lecturer on Medical Jurisprudence.
Timothy Childs, M.D., Prof. of Surgery.
Paul A. Chadbourne, M.D., Prof. of Chem. and Pharmacy.
David S. Conant, M.D., Prof. of Anatomy and Physiology.
W. C. Robinson, M.D., Prof. of Materia Med. and Therap.

The session for 1861 will commence on Thursday, the 14th of February, and continue to the last of May.

Fees.—The fees for admission to the several courses of lectures, payable in advance, are $55. The Graduation fee, including the Diploma, is $18. Matriculation or Library fee, payable but once, $5. Pupils who have attended two full courses of Medical Lectures, one of which has been at this school, are admitted to all subsequent courses, without payment of any lecture fees.

Students who have attended two full courses at other regular Medical Institutions, are required to pay one-third of the usual fees for admission to their first course of Lectures at this school, in addition to the Matriculation fee.

Graduation.—Students, and particularly candidates for a degree, are examined either daily or weekly on the subjects of the lectures. The examinations for the degree of Doctor of Medicine are held by the Faculty of Medicine at the close of the course of lectures, and also on the second Monday before the annual commencement of the College, which occurs on the first Wednesday of August. The candidates must have devoted three years to their professional studies under the direction of a regular practitioner of medicine. They must have attended two full courses of medical lectures in some regular, incorporated medical Institution, and the last course previous to examination must have been at this Medical School. They must deposit with the secretary of the faculty satisfactory certificates of having pursued their medical studies for the required term, and of possessing at the time of examination, a good moral character. They must also pass a satisfactory examination in anatomy, physiology, surgery, chemistry, materia medica, pharmacy, obstetrics, and the theory and practice of medicine. They must also read and defend a thesis or dissertation on some medical subject, in the presence of the faculty of medicine. As the faculty adhere to and teach, as the foundation of all true medical science, those great and leading principles which have borne the test of time, and have the support of the highest and best authorities, none whose views and principles of practice are found to be radically at variance with these, can be recommended by them for a diploma. Those candidates who have not received a collegiate education, must satisfy the faculty of their proficiency in the Latin language and in natural philosophy. Degrees are conferred at the close of each course of lectures, and at the annual commencement of the College in August. A fair copy of the thesis or dissertation must be deposited with the Secretary of the Faculty at least ten days before the commencement of the examination at the close of the lectures. These copies are preserved in the medical library; and it is required that they should be written on paper prepared specially for the purpose of binding them into volumes.

Practical Anatomy.—Material for dissections will be abundant, and will be furnished at cost; with all needed assistance, gratuitously rendered, by the lecturer and demonstrator of anatomy.

Clinical Advantages.—Frequent opportunities will be afforded to the class of witnessing surgical operations. All examinations in the presence of the class are made without charge, and all operations are performed without charge, except to those abundantly able to pay. The surgical cases and operations, before the class, increase in interest annually. The surgical clinique is attended on Saturday mornings by Dr. Conant, the first half of the term, and by Dr. Childs the last half.

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* Circulars not received.

MARYLAND.

UNIVERSITY OF MARYLAND.—MEDICAL DEPARTMENT.

Nathan R. Smith, M.D., Professor of Surgery.
Wm. E. Aiken, M.D. Prof. of Chemistry and Pharmacy.
Samuel Chew, M.D., Prof. of Medicine.
G. W. Miltenberger, M.D., Prof. of Obstetrics.
Wm. A. Hammond, M.D., Prof. of Anatomy and Physiology.
Edward Warren, M.D., Professor of Materia Medica and Therapeutics.
James H. Butler, M.D., Demonstrator of Anatomy.

The fifty-fourth session of the School of Medicine in the University of Maryland will commence on Monday, the 14th of October, 1861, and end on the 1st of March, 1862.

Clinical Advantages.—For the purpose of Clinical instruction, the School enjoys the inestimable advantage of possessing a capacious hospital of its own. The Baltimore Infirmary, in the immediate vicinity of the College, has been greatly enlarged by the present Faculty, and is under their sole charge and control. This institution contains a hundred and fifty beds, and receives into its wards every variety of acute and chronic diseases, thus furnishing an abundant and never-failing supply of cases for Clinical study. During the sessions daily instruction is given at the bed-sides by the Professors of Surgery and the Principles and Practice of Medicine; and this system of teaching is continued through the remainder of the year by other members of the Faculty, for the benefit of all matriculates of the School who choose to attend. Of the utility and indeed indispensable necessity of Clinical training as a part of medical education, the Faculty are thoroughly aware. They furnish it without charge; they advise and exhort their pupils to frequent the wards, and observe for themselves the character and treatment of diseases; and they admit to examination no candidate for graduation unless he produce evidence of his attendance at the hospital.

Practical Anatomy.—The facilities afforded by the School for the study of Practical Anatomy are all that the most diligent and zealous student can desire. Anatomical *subjects* are supplied in abundance, and at moderate expense. The rooms are open from the beginning of October; and, as they are lighted with gas, dissection can be pursued in the evening as well as during the day.

Microscopical Anatomy.—The important science of Microscopical Anatomy is not neglected. The Faculty have placed in the Museum three excellent Microscopes, and have at their command one of the largest microscopical collections in the country, containing specimens of all the tissues and structures entering into the composition of the body. These are placed under the Microscopes, and changed as occasion requires. They are at all times open to the study of the students. The Faculty take pride in saying that they were the first to introduce into the country this method of studying Histology, a science which it is almost impossible to master, unless the opportunity is afforded of seeing for one's self.

Fees.—The fees for attendance on Lectures are, for Surgery, Chemistry, Materia Medica, Anatomy, Principles and Practice of Medicine, Obstetrics, *fifteen dollars* each; Practical Anatomy, *ten dollars*.

No charge is made for the clinical ticket.

A limited number of students will be permitted to reside in the Infirmary as clinical assistants. The fee is *one hundred dollars* per year, payable in advance.

Matriculation fee, $5. Graduation fee, $20.

Graduation.—Candidates for graduation must have attended two courses of Lectures in this school, or one in this *after* one in some other respectable Medical school.

Every candidate must deposit with the Dean of the Faculty, on or before the 14th day of February, a thesis of his own composition on some subject connected with medical science, or a clinical report of not less than six cases of disease, drawn up from his own observation.

Every candidate must appear before the Faculty for examination on the various branches of Medicine taught in this school. He must also produce evidence of attendance, during one session, on Practical Anatomy and Clinical Medicine.

MASSACHUSETTS.

HARVARD UNIVERSITY—MEDICAL DEPARTMENT.

Cornelius C. Felton, LL.D., President.
D. Humphreys Storer, M.D., Prof. of Obstetrics and Medical Jurisprudence.
John B. S. Jackson, M.D., Shattuck Prof. of Morbid Anatomy, and Curator of the Anatomical Museum.
Henry I. Bowditch, M.D., Prof. of Clinical Medicine.
Oliver W. Holmes, M.D., Parkman Prof. of Anatomy and Physiology.
George C. Shattuck, M.D., Hersey Prof. of the Theory and Practice of Physic.
Henry J. Bigelow, M.D., Prof. of Surgery.
John Bacon, M.D., University Prof. of Chemistry.
Edward H. Clarke, M.D., Prof. of Materia Medica.
David W. Cheever, M.D., Demonstrator of Anatomy.

The regular winter course of lectures at this Institution will begin on the first Wednesday in November, and continue seventeen weeks. The duration of the winter course of lectures, which is now announced, has not been augmented. But, on the other hand, a Summer Term has been established. The Corporation of Harvard College, at the instance of the Medical Faculty, authorized the latter to extend the term of instruction, for students who desire it, throughout the year. This arrangement was carried into effect four years ago; and the faculty have been gratified to find that this policy, of the advantages of which there can be little doubt, has since been formally recommended to the colleges by the American Medical Association. A detailed account of the lectures and recitations of the summer term can be found in the annual announcements of that term. During the period of the lecture term, it is the aim of the Professors to present theoretically, clinically, and in the operating room, a comprehensive and illustrated view of the important, scientific, and practical details of medical and surgical science. This course of lectures is complete in itself, and is in fact the usual winter course of medical colleges.

Clinical Advantages.—Instruction is given at the bedside of the patient in the wards of the Massachusetts General Hospital, by the Professor of this branch, who is one of the attending physicians of the Hospital. He also gives clinical lectures, in the lecture room at the Hospital. Dr. Bowditch will give special attention in his wards to Auscultation and Percussion. Students will thus have an opportunity to become acquainted with the most approved modes of examining diseases of the heart and lungs.

With the object of facilitating the clinical study of disease, an arrangement has been made with Dr. Abbot, admitting physician to the Hospital, by which students are enabled to be present at the examination of out-patients, who present some of the most interesting phases of disease, particularly Diseases of the Skin, but who are not admitted to the wards of the Hospital.

By arrangements also with the managers of the Boston Dispensary, the medical class are admitted to the medical and surgical practice of this large charity. More than eight thousand patients are treated annually at the Dispensary. An extended opportunity is here afforded for the clinical study of diseases of the skin, of syphilis, of the eye and ear, as well as of ordinary cases. Clinical Surgery is taught at the Massachusetts General Hospital by Dr. Bigelow. Operations occurring at the Hospital are performed in the presence of the class. These operations are explained, and the points in surgery which they illustrate are dwelt upon at length, by the Professor, in his general as well as in his clinical lectures. Students are enabled to examine for themselves the surgical cases which are to be found in this large metropolitan Hospital.

Surgical Operations.—Especial attention is directed to the great number and variety of Surgical Operations performed weekly at this Hospital.

Society for Medical Observation.—In connexion with the Professorships of Theory and Practice and of Clinical Medicine, and with the assistance of Drs. Bacon, Abbot, and Ellis, the older students meet once a week for the reading of cases and for criticisms thereupon. These meetings form, in fact, a Society for Medical Observation. From the interest heretofore exhibited in them by the older students, the Professors cannot forbear recommending them as one of the important features of this course of college instruction.

Practical Anatomy.—Anatomical material is abundantly furnished, and at a very moderate cost. The Demonstrator will attend daily at the dissecting-room, and superintend the dissections. The dissecting-room is lighted with gas, and every facility afforded for becoming thoroughly acquainted with the anatomy of the body.

Warren Museum.—The magnificent hall of the Warren Anatomical Museum is opened to students for the inspection and study of the specimens, under the direction of Dr. Jackson, the Curator.

Library.—The Library contains a large collection of modern medical works, and many duplicates of the best Text-Books. Yearly additions are made to the library, which is open to students.

Eye and Ear Infirmary.—An excellent opportunity is afforded to medical students for the clinical study of diseases of the Eye and Ear, at the Infirmary, which, by the liberality of its medical officers, is accessible, without fee, during their visit in the wards.

Chelsea Hospital.—Dr. Davis has kindly consented to allow students to visit the patients of the Chelsea Hospital. Students will find here, among other subjects for study, a large collection of venereal diseases, and of diseases of the skin.

Fees.—Fees for the Lectures at the University, $80; Matriculation fee, $3; Graduation fee, $20.

BERKSHIRE MEDICAL INSTITUTION, PITTSFIELD.

Henry H. Childs, M.D., President of the Corporation, Emeritus Professor of Theory and Practice of Medicine, Professor of Obstetrics, and Diseases of Women and Children.
Timothy Childs, M.D., Prof. of Surgery.
Henry M. Seely, M.D., Prof. of Chemistry and Toxicology.
R. Cresson Stiles, M.D., Prof. of Physiology and Pathology.
Wm. Henry Thayer, M.D., Prof. of Medicine.
William P. Seymour, M.D., Prof. of Materia Medica.
James D. Colt, Esq., Prof. of Medical Jurisprudence.
Corydon L. Ford, M.D., Prof. of Anatomy.
Robert W. Gray, Demonstrator.

The thirty-eighth lecture term commences on the first Thursday in August, and continues sixteen weeks. Instead of mingling promiscuously all the branches of Medicine, the study of the fundamental branches of medical science precedes the course of practical instruction. The student cannot neglect this order in his acquisitions without much loss of time and toil. The first two months of the term are devoted mainly to the following branches:—Chemistry and Toxicology, by Prof. Seely; Anatomy, General and Special, by Prof. Ford; Physiology and Pathology, by Prof. Stiles. The last half the term is occupied as follows:—Obstetrics and Diseases of Women and Children, by Prof. H. H. Childs; Surgery, by Prof. T. Childs; Theory and Practice of Medicine, by Prof. W. H. Thayer; Materia Medica and Pharmacy, by Prof. Wm. P. Seymour; Medical Jurisprudence, by Prof. J. Colt.

Clinical Instruction.—The numbers of patients coming from a large section of country to seek relief at the medical and surgical cliniques of the College, have rendered the demand for a Hospital in connexion with it imperative The cliniques are continued throughout the year, and during the lecture term a portion of every Wednesday and Saturday will be devoted to Clinical Instruction. Practical instruction on Auscultation and Percussion will be given by the Professor of Theory and Practice.

The Museum.—The Museum is well supplied with anatomical preparations, enlarged models, the "Plastic Preparations" of Auzoux; a large collection of paintings and plates; surgical apparatus, preparations for the study of morbid anatomy; specimens of drugs and pharmaceutical preparations; in fine, with all the appliances for thorough medical instruction.

The Chemical Laboratory, Library, and Dissecting Rooms.—The Chemical Laboratory is well supplied with apparatus and material for public teaching and private instruction in chemical manipulation; the Library has received numerous additions of modern works; the Dissecting Rooms are well lighted and ventilated, and supplied throughout the year with anatomical material.

The Winter Term.—This Term commences on the first of January and continues until the second Thursday in May, and will be occupied by recitations and familiar lectures and demonstrations.

Graduation.—Degrees are conferred at the close of the lecture term, and at other periods to correspond with the expiration of the term of study prescribed for candidates. The requisites for admission to the degree of Doctor of Medicine are: three full years of study, under a regular practitioner of medicine; attendance on two full courses of lectures in Medical Institutions regularly established, one of which courses must have been attended at this Institution; a satisfactory examination; a thesis on some subject connected with medical science, and a good moral character. Gentlemen who intend to present themselves as candidates for a degree, are required to procure full and formal certificates of time.

Fees.—For all the Courses of Lectures, $50; fee for those who have already attended to full courses at Regular Incorporated Medical Schools, $10; Matriculation Ticket, $3. Students who have attended two courses at this Institution, will be required to pay only the Matriculation fee. Graduation fee, $18; Library fee, $1.

MICHIGAN.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF MICHIGAN.—ANN ARBOR.

Rev. Henry P. Tappan, D.D., LL.D., President.
Zena Pitcher, M.D., Professor Emeritus of the Institutes of Medicine and Obstetrics.
Abram Sager, M.D., Prof. of Obstetrics and Diseases of Women and Children.
Silas H. Douglass, M.D., Professor of Chemistry and Pharmacy and Toxicology, and Dean.
Moses Gunn, M.D., Professor of Surgery.
Alonzo B. Palmer, M.D., Prof. of the Th. and Prac. of Med.
Corydon L. Ford, M.D., Prof. of Anatomy.
Hon. T. M. Cooley, Prof. of Medical Jurisprudence.
Samuel G. Armor, M.D., Prof. of the Institutes of Medicine and Materia Medica.
Alfred Dubois, A.M., Assistant Prof. of Chemistry.
William Lewitt, M.D., Demonstrator of Anatomy.
A. K. Johnston, A.B., Assistant in the Chem. Department.

Lectures commence on the first day of October, and continue for six months.

Terms of Admission.—Each candidate for admission must be provided with satisfactory evidence of good moral character; and, if a candidate for graduation, must also possess a good English education, the knowledge of Natural Philosophy, the Elementary Mathematical Sciences, and such an acquaintance with the Latin Language as will enable him to appreciate the technical language of medicine, and to read and write prescriptions. Students are expected to be in attendance upon *the first day of the term*, as the regular course of instruction will commence upon, and continue from, that day; *and, by the rule adopted, certificates are issued only for the period of actual attendance.*

Course of Instruction.—Four lectures are delivered daily. Previous to each lecture the students are carefully examined upon the subject of the preceding lecture. The total number of lectures in the term will thus be between six and seven hundred. In addition to this, the class is divided into sections for examination of various tissues of the body by means of microscopes; so that each student has repeated opportunities for becoming familiar with the minute structure of parts, and also the practical working of the instruments.

Degrees.—To be admitted to the Degree of "Doctor of Medicine," the student must exhibit evidence of having pursued the study of Medicine and Surgery for the term of three years, with some respectable Practitioner of Medicine (including lecture terms); must have attended two full courses of lectures, the last of which must have been in the College of Medicine and Surgery of the University of Michigan, and the previous one in this or some other respectable Medical Institution; must have been engaged in the study of Practical Anatomy; must be twenty-one years of age; must have submitted to the Faculty a thesis composed and written by himself, on some medical topic, and have passed an examination at the close of the term, satisfactory to the Faculty. To encourage a higher grade of preliminary acquirement, an allowance of six months from the term of study is made in favor of graduates of the Department of Science and Arts, and of other respectable Literary Colleges. Each candidate for graduation must so announce himself at the commencement of his second course, and must be examined in Anatomy, Physiology, Materia Medica, and Chemistry. He is also required, during the Course, to submit to written examinations by each Professor, on some subject pertaining to his department, in order to further test his knowledge of such subjects, and his ability to express himself correctly in writing. His final thesis may be written either in English, German, French, or Latin; and if required must be defended before the Faculty. The theses of successful candidates are to be preserved among the archives of the College. The Faculty select one thesis, or more, to be read at the Annual Commencement, and also, in accordance with a resolution of the Board of Regents, a thesis for publication by the Superintendent of Public Instruction.

General Observations.—The University of Michigan has aimed to elevate the standard of medical attainments, as will appear by consulting the requirements for a Medical Degree. Should the student enter upon the course with an inadequate preparation, still he cannot be admitted as a candidate for the degree of M.D., nor hope to pass the required examination without subjecting himself to severe study, and supplying many early deficiencies.

The Medical Faculty, in common with all enlightened members of the Profession, desire earnestly that a rule might prevail in our country like that which prevails in most of the Universities of Europe, by which a liberal education should be made the necessary introduction to professional study. The sciolist easily runs into the empiric; but he who has obtained a thorough scientific discipline knows how to discriminate between visionary conjectures and established truths. In pursuance of this prime object, several modifications of the prevailing system of medical teaching have been adopted, among which may be specified, —The extension of the lecture term; thorough daily examinations upon the topics discussed; cultivation of the power of communicating medical facts and principles in writing; frequent examinations in review; and adequate proofs of high proficiency, prior to granting the honors of the Institution.

Arrangements have been made by which an ample supply of *matériel* for the purpose of Practical Anatomy has been secured, and special attention is devoted to rendering this important study as advantageous as possible to the student. Experience has shown that the *matériel* for this Department can be furnished as abundantly and at as low rates as at any other Institution of the kind.

The means of illustration in the Chemical Department and the Department of Materia Medica were, not long since, greatly increased by the importation from Paris of an extensive suite of rare and pure Chemicals, and of the various articles of Organic Materia Medica, put up in a beautiful and uniform style. The Chemical Apparatus and Surgical Instruments have also been much increased, and the means of illustrating cutaneous and other diseases from plates and models have become very extensive.

Additions are constantly being made to the Museum, of Anatomical and Pathological specimens, as well as of specimens of the crude Materia Medica and of Pharmaceutical preparations. Various friends of the Institution have continued to manifest their kindness and interest by sending contributions to the different departments.

Fees.—Matriculation, $10. Incidentals, $5. Tuition, gratuitous. Diploma—for the parchment, filling, &c., $3.

MISSOURI.

ST. LOUIS MEDICAL COLLEGE, ST. LOUIS.

M. L. Linton, M. D., Professor of the Principles and Practice of Medicine.
A. Litton, M.D., Professor of Chemistry and Pharmacy.
Charles A. Pope, M.D., Professor of Surgery.
M. M. Pallen, M.D., Professor of Obstetrics.
W. M. McPheters, M.D., Professor of Materia Medica.
Chas. W. Stevens, M.D., Professor of Anatomy.
John B. Johnson, M.D., Prof. of Medicine and Pathol.
J. H. Watters, M.D., Professor of Physiology and Medical Jurisprudence.
E. H. Gregory, M.D., Demonstrator of Anatomy.
L. Dinkler, Curator.

The ensuing Course of Lectures will commence on Friday, the first of November next, and continue until the following March. Preliminary Lectures will be delivered at the College during the month of October, as also Clinical Lectures at the Hospitals and Dispensary.

Practical Anatomy.—The Anatomical rooms will be opened on the first of October, for the benefit of those students who may arrive before the commencement of the regular lectures. They will be under the superintendence and direction of the Professor and Demonstrator of Anatomy, one of whom will always be present to afford every information and assistance to those engaged in dissections.

The following Institutions afford the Faculty ample opportunities for Clinical instruction.

The St. Louis Hostital.—This Institution is situated within three squares of the College building, and, on account of its central and convenient location, is the receptacle of most of the cases of severe recent injury. It is under the exclusive control of the Faculty during the whole year. The entire forenoons of Wednesdays and Saturdays are devoted exclusively to Clinical exercises in both Medicine and Surgery, by the whole class, either in this or some one of the Hospitals.

City Hospital.—This large and magnificent Hospital is of easy access, and always well filled with patients. During the whole term of Lectures, some one of the Faculty will be in attendance upon either the Medical or Surgical Department. Clinical Lectures are here delivered by the Professor of Clinical Medicine or Surgery, during the preliminary as well as the regular course. The number of patients admitted during the past year amounted to four thousand.

United States Marine Hospital.—This Institution, erected by the General Government, is situated in South St. Louis, and is devoted to the reception of sick and disabled boatmen.

St. Louis Lying-in Hospital.—A large and appropriate structure has been erected on the south-east corner of Tenth and O'Fallon streets. The Physician in charge is Dr. L.

Charles Boisliniere, who will be glad to extend its practical benefits to all students upon the payment of a small fee. Professor Pallen is the consulting Physician.

The O'Fallon Clinic and Dispensary.—This establishment occupies a building adjoining the Lecture Room of the College. Here, through the enlarged benevolence and liberality of its founder, Col. John O'Fallon, the poor receive medical and surgical assistance free of charge.

Anatomical Material, in St. Louis, is both *cheap* and *abundant*.

Graduation.—That the candidate be twenty-one years of age, of good moral character, and has been engaged in the study of Medicine for three years (courses of lectures included). That he shall have attended two courses of lectures in this Institution. Attendance on a regular course in some respectable and generally accredited medical school, or four years of reputable practice, will, however, be considered as equivalent to one of the courses above specified. The Dissecting ticket must also have been taken at least one session in this or some other school. He must also have followed the practice of a Hospital.

That he shall undergo a satisfactory examination on all the branches taught in this College, and write an acceptable thesis, either in the English, Latin, French, or German language, on some subject connected with Medicine. That he notify the Dean, in writing, of his intention to become a candidate by the first of February, and deliver to him his thesis, accompanied by the graduating fee; which shall be returned, along with the thesis, in case of withdrawal or rejection.

Graduates of other respectable schools are admitted to the Lectures on the payment of the Matriculation fee only.

Students will be expected to exhibit their tickets to the Janitor after the first two weeks of the session.

Fees.—Fees for the whole course (paid in advance) amount to $105. The Matriculating Ticket (paid but once) is $5; that of the Demonstrator, $10. The Hospital Tickets are gratuitous, and the Graduating Fee is $20.

MISSOURI MEDICAL COLLEGE, ST. LOUIS.*

John S. Moore, M.D., Theory and Practice of Medicine.
John Barnes, M.D., Materia Medica, Therap. and Med. Bot.
John T. Hodgen, M. D., Anatomy.
E. S. Frazer, M.D., Obstetrics and Diseases of Women.
Joseph N. McDowell, M.D., Surgery and Surg. Anatomy.
Thomas McMartin, M.D., Pathology and Clinical Medicine.
G. M. B. Mangles, M.D., Chemistry and Physiology.
L. T. Pimm, M.D., Adjunct of Surgery.
John J. McDowell, M.D., Demonstrator.

Primary Lectures will be delivered at the College, by the Professors, on the subjects connected with their respective departments, and daily Clinics will be delivered at the Hospital.

Graduation.—Three years' study, including two courses of lectures, or reliable evidence that the applicant has been reputably engaged in practice for three years, and has attended a course of lectures in this institution, will be required of all who wish to graduate.

Fees.—For a full Course of Lectures, $105; for Graduation, $20; for admission to the Dissecting Rooms and Demonstrations, $10; Matriculation fee (paid but once), $5.

NEW HAMPSHIRE.

MEDICAL DEPARTMENT OF DARTMOUTH COLLEGE, HANOVER.

Rev. Nathan Lord, D.D., President.
Hon. Isaac F. Redfield, LL.D., Prof. of Med. Jurisprudence.
Dixi Crosby, M.D., Prof. of Surgery, Obstetrics, Diseases of Women and Children, and Librarian.
Edward E. Phelps, M.D., LL.D., Prof. of Theory and Practice of Physic and Pathological Anatomy.
Albert Smith, M.D., Professor of Materia Medica and Therapeutics.
Oliver P. Hubbard, M.D., Prof. of Chemistry and Pharmacy.
Edmund R. Peaslee, M.D., LL.D., Professor of Anatomy and Physiology.
Henry M. Field, M.D., Demonstrator of Anatomy.

The annual course of lectures commenced Thursday, Aug. 1st, 1861, and continues fourteen weeks.

Practical Anatomy.—Materials furnished for private dissections at cost.

Clinical Advantages.—Patients presenting themselves before the Class will be operated upon gratuitously. Ample provision has been made for the accommodation of patients after operations, at the Hospital established by Dr. Crosby, where patients are received and treated through the year.

Graduation.—Every candidate for the degree of Doctor of Medicine shall give satisfactory evidence of good moral character, and (unless a college graduate) of a competent knowledge of the Latin Language. He shall have attended two full courses of lectures on all the branches of medical science, at some regularly authorized medical school—one of which courses shall have been at this Institution. He shall give satisfactory evidence that he has devoted three full years to his professional studies, under the direction of some regular practitioner—the time spent at lectures being included. He shall prepare and present to the faculty, at least ten days before the examination, a dissertation on some medical subject, which he may be called upon to read and defend at his examination, as the faculty may direct. No person will be admitted to examination for a degree who intends to engage in any other than the regular practice. There are three examinations, viz.—On the Tuesday preceding the second Wednesday in May; on the Tuesday preceding the annual commencement of the college; and at the close of the medical lectures.

Fees.—Fees payable in advance. For the Course, $50; Matriculation (paid but once), $5; Graduating Expenses, $18. No Notes will be received in payment of lecture fees, unless the sureties are personally known to some member of the faculty. Students who have attended two courses, one of them at this Institution, may attend a third gratuitously; of those who have attended two courses in any other regular Institution, one-third of the usual lecture fee will be required.

NEW YORK.

COLLEGE OF PHYSICIANS AND SURGEONS.—MEDICAL DEPARTMENT OF COLUMBIA COLLEGE.—FACULTY.

Charles King, LL.D., President of Columbia College.
Edward Delafield, M.D., President of the College of Physicians and Surgeons.
Alexander H. Stephens, M.D., LL.D., Professor Emeritus of Clinical Surgery.
Edward Delafield, M.D., Professor Emeritus of Obstetrics.
John Torrey, M.D., LL.D., Professor Emeritus of Chemistry and Botany.
Joseph Mather Smith, M.D., Professor of Materia Medica and Clinical Medicine.
Robert Watts, M.D., Professor of Anatomy.
Willard Parker, M.D., Professor of the Principles and Practice of Surgery and Surgical Anatomy.
Chandler R. Gilman, M.D., Professor of Obstetrics, the Dis. of Women and Child., and Med. Jurisprudence.
Alonzo Clark, M.D., Prof. of Pathology and Prac. Medicine.
John C. Dalton, Jr., M.D., Prof. of Phys. and Micros. Anat.
Samuel St. John, M.D., Professor of Chemistry.
Thos. M. Markoe, M.D., Adjunct Professor of Surgery.
Henry B. Sands, M.D., Demonstrator of Anatomy.
William H. Draper, M.D., } Assistants to the Professor of
George F. Shrady, M.D., } Surgery.
Foster Swift, M.D., Assistant to the Professor of Obstetrics.
Governeur M. Smith, M.D., Librarian.

The Regular Course of Lectures for the Session of 1861–'62 will commence on Monday, the 21st of October, 1861, and continue until the second Thursday of March following.

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* Circular not received.

Clinical Advantages.—The following are the most important clinical institutions open to medical students and practitioners.

New York Hospital, 319 Broadway.—Open to medical men and students daily, without charge. Prof. J. M. Smith is one of the Attending Physicians, and Profs. Parker and Markoe, Attending Surgeons. All these gentlemen give clinical instruction during their terms of attendance. Public medical visit, Wednesday and Saturday, at 1½ P.M. Public surgical visit, Monday, Tuesday, Thursday, and Friday, at 1½ P.M. Operating days, Monday and Thursday.

Bellevue Hospital, corner of 26th street and 1st Avenue. As in New York Hospital, clinical instruction is given daily by the medical staff. Whole annual number of patients, over 10,000. Prof. Parker is one of the Visiting Surgeons, and Prof. Clark, one of the Visiting Physicians. Medical visit on Monday, Tuesday, Thursday, and Friday, at 1½ P.M. Surgical visit on Wednesday and Saturday, also at 1½ P.M. Operating days, Wednesday and Saturday.

Blackwell's Island Hospitals, Blackwell's Island, East River, foot of 61st street.

Emigrants' Hospital, Ward's Island, East River, foot of 106th street.

Nursery Hospital, Randall's Island, East River, foot of 117th street.

Children's Hospital, 51st street, near Third Avenue.

New York Eye Infirmary, Second Avenue, corner of East 13th street.

New York Ophthalmic Hospital, Third Avenue, near Eleventh street.

Surgical and Medical Clinics.—These Clinics are among the most valuable and extensive means of instruction afforded by the College. Patients are examined and prescribed for in the presence of the class, and subsequently (unless already in the care of some medical practitioner) assigned to one of the students, by whom they are attended at their own houses during the interval, and presented at the College on the next regular clinic day, when the result of the treatment is seen, and such further directions given as may be necessary. There will also be four Clinics in each week, viz.—A Surgical Clinic, by Profs. Parker and Markoe, every Monday, at 11 A.M. A Medical Clinic, by Prof. Clark, every Thursday, at 11 A.M. A Surgical Clinic, by Dr. Detmold, every Wednesday, at 2½ P.M. A Clinic for Females, by Dr. Swift, every Friday, at 2½ P.M. The Lectures given in this Course will not interfere with those of the Regular Session. Students who matriculate in the College are entitled to attend the Preliminary Course without extra charge.

Practical Obstetrics.—Each advanced student in this College has one or more cases assigned to his *exclusive* care, and many thus become practically familiar with this important branch in all its details. Should any abnormal or difficult case occur, the student has the privilege of sending for the Professor of Obstetrics, who then takes charge of the patient, and embraces the opportunity of giving clinical demonstration of the most approved method of treatment.

Practical Anatomy.—A large and commodious apartment is provided in the College for Practical Anatomy. It is admirably lighted and ventilated, and abundantly supplied with gas and Croton water. It will be opened early in October, and continue open until the following April.

Attendance in the Dissecting-Room, and on the Demonstrations, is optional with the students; but they are earnestly advised to avail themselves of the opportunity. Material for dissection is supplied in abundance, and at a low rate; so that every student can go through with a thorough course of dissection. Demonstrator's Ticket, $5, which admits the student to the Dissecting-Room.

Preliminary Term.—The preliminary term for the ensuing Fall Season commenced on Monday, Sept. 23, and continues four weeks. It will consist of a series of lectures on subjects which, in the present state of national affairs, are of the highest importance to every student and practitioner. The intention of the lecturers is to offer every facility for the acquirement of a knowledge of military surgery to all who may have a desire to join the army or navy. The following is the list of lecturers:—Prof. Markoe, on Gunshot Wounds; Prof. Clark, on Diseases incident to Camps; Prof. St. John, on Adulterations in Food and Drink; Dr. Detmold, on the Field Duties of the Military Surgeon; Dr. W. C. Livingston, [illegible] Dressing and Bandaging; Dr. D. S. Conant, on Dislocations; Dr. F. J. Bumstead, on Venereal.

Faculty Prizes.—Two Prizes are annually awarded by the Faculty, at the College Commencement in March, for the best two Graduating Theses presented during the year, viz.—A First Prize of Fifty Dollars, and a Second Prize of Twenty-five Dollars. The Graduating Theses competing for these prizes should be handed in to the Secretary of the Faculty, in the Fall, by the 1st of September; and in the Spring, by the 1st of February.

Harsen Prizes.—Founded by Jacob Harsen, M.D., an Alumnus of the College. Three Annual Prizes will be awarded for the best three written Reports of the Clinical Instruction in the New York Hospital, during any four months of the year immediately preceding the Annual Commencement in March, which shall be prepared and presented by students of the College of Physicians and Surgeons, viz.:—A First Prize, consisting of a Gold Medal, worth Fifty Dollars, and One Hundred Dollars in money. A Second Prize, consisting of a Silver Medal, and Fifty Dollars in money; and a Third Prize, consisting of a Bronze Medal, and Twenty-five Dollars in money. All the medals to be struck from the same die. The Reports competing for these Prizes should be handed in to Professor Clark, on or before the 20th day of February, in each year.

Stevens Prize for 1862.—Offered by Alexander H. Stevens, M.D., LL.D., Professor Emeritus of Surgery, and Ex-President of the College. This Prize, consisting of the sum of One Hundred Dollars, will be awarded for the best series of Preparations which shall adequately illustrate the Anatomy, Physiology, and Pathology of the Larynx. The preparations competing for this prize should be sent in to Dr. Henry B. Sands, Curator of the College, on or before the 1st day of March, 1862. The preparations receiving the above prize, as well as those of which honorable mention may be made, will be deposited in the Museum of the College of Physicians and Surgeons, inscribed with the names of the successful competitors. This Prize is open for competition to all students and medical men.

Graduation.—There are two periods for conferring degrees: one at the Annual Commencement, in March; the other at the opening of the Regular Course, in October. Candidates for the degree of Doctor of Medicine must have attended two full courses of Lectures,—the latter in this College. They must also have studied medicine three years, under the direction of a regular physician, including the attendance upon lectures; and have attained the age of twenty-one years. Each candidate is required to write a thesis on some subject connected with the science of medicine, and to deposit it with the Secretary of the Faculty. Full and formal certificates of the time of study, of moral character, and of age, must also be furnished.

The examination of candidates takes place semi-annually; that for graduation in the Spring, early in March; that for graduation in the Fall, on the second Tuesday in September.

Fees.—Matriculation fee, $5. Fees for the full Course of Lectures by all the Professors, $105; but students are not required to take out all the tickets during one session. Ticket of the Demonstrator of Anatomy, $5. Graduation fee, $30. Students who have attended two full courses in this College, or who, having attended one full course in some regularly established medical school, shall subsequently attend one full course in this College, are admitted to a third course of lectures on paying the matriculation fee only. Graduates of this school are admitted without fee.

Graduates of other schools, who have been in practice three years, and Theological Students, are admitted on general ticket by paying the matriculation fee.

UNIVERSITY OF NEW YORK—MEDICAL DEPARTMENT.

The Session for 1861–62 will begin on Monday, Oct. 21, and will be continued until the 1st of March. The Courses of Lectures given will be on Anatomy—General, Descriptive, Surgical, and Pathological; Principles and Operations of Surgery; Materia Medica and Therapeutics; Institutes and Practice of Medicine; Obstetrics, the Diseases of Women and Children, with Clinical Midwifery; Chemistry and Physiology; Clinical Surgery; Clinical Medicine; Clinical Lectures on the Diseases of the Genito-Urinary Organs; Clinical Lectures on the Diseases of Women and Children; Clinical Lectures on Physical Diagnosis.

Rev. Isaac Ferris, D.D., LL.D., Chancellor of the University.
Valentine Mott, M.D., LL.D., Emerit. Prof. of Surgery, etc.
Martyn Paine, M.D., LL.D., Prof. of Mat. Med. and Therap.
Gunning S. Bedford, M.D., Prof. of Obstetrics.
John W. Draper, M.D., LL.D., Prof of Chem. and Phys.
Alfred C. Post, M.D., Prof. of Surgery.
William H. Van Buren, M.D., Professor of Anatomy.
John T. Metcalfe, M.D., Professor of Medicine.
J. W. S. Gouley, M.D., Demonstrator of Anatomy.
J. H. Hinton, M.D., } Prosectors of Surgery.
Alexander B. Mott, M.D., }

LECTURERS IN THE SPRING, SUMMER, AND AUTUMN COURSE.

T. Gaillard Thomas, M.D., Wm. R. Donaghe, M.D., Prof. John C. Draper, M.D., J. B. Reynolds, M.D., Jas. Wynne, M.D., Gonzales Echeverria, M.D., Wm. F. Holcomb, M.D.,

Clinical Instruction constitutes a prominent feature in the plan of education; and the unlimited resources of New York give ample opportunity for *familiarity with disease at the bed-side.*

1st. *An Obstetric Clinic for the Diseases of Women and Children*, on every Monday, from 2½ to 4½ o'clock P.M., by Prof. Bedford. This clinic was first established by Prof. Bedford, in October, 1850, and it has met with constantly increasing success. From the period of its first organization to the present date, there have been presented to the classes of the University more than twelve thousand cases of the most interesting diseases of women and children. Every variety of disease incident to women and children is thus brought before the pupils, and the fullest opportunity afforded of studying the maladies of such patients.

2d. *Surgical Clinic* every Tuesday, from 3 to 4½ o'clock P.M., by Prof. Mott. Almost every variety of surgical cases has been presented to the class, and many operations performed.

3d. *Medical Clinic* every Wednesday, from 2½ to 3½ o'clock P.M., by Prof. Metcalfe. This clinic is full of interest, from the great number of miscellaneous cases of disease. The Clinical Class is divided into sections, each of which examines, at leisure, in a room provided for the purpose, the lungs, heart, etc., of patients, a written record of whose cases has been previously dictated before the class by the Professor, and which serves as a guide during the examination.

4th. *Surgical Clinic, with the Diseases of the Genito-Urinary Organs*, every Wednesday, from 3½ to 4½ o'clock P.M., by Prof. Van Buren. This clinic will, independent of its general surgical practice, afford ample opportunities to study the diseases appertaining to the genito-urinary organs. Cases of syphilis, exhibiting every variety of that disease, of gonorrhoea, gleet, stricture of urethra.

5th. *Surgical Clinic* every Saturday, from 11 A.M. to 1 P.M., by Prof. Post. Many cases of interest have been prescribed for during the year, and numerous operations have been performed before the class. Interesting surgical cases have been placed under the care of advanced students.

THE NEW YORK HOSPITAL, of which Professors Mott and Post are Consulting Surgeons, is the largest *Surgical* Hospital in this country. It is open to students daily at 1½ o'clock P.M., throughout the year. Admittance to the hospital is free.

BELLEVUE HOSPITAL.—Prof. Mott is the Senior Consulting Surgeon. Clinical lectures and surgical operations daily throughout the year. Regular operating days, Wednesdays and Saturdays, at 1½ o'clock P.M.

ST. VINCENT'S HOSPITAL—JEWS' HOSPITAL—ST. LUKE'S HOSPITAL.—These are large and important institutions. Prof. Mott is Senior Consulting Surgeon to St. Vincent's and the Jews' Hospitals. Prof. Van Buren Consulting Surgeon to St. Vincent's Hospital. Prof. Metcalfe is Consulting Physician and Prof. Post Consulting Surgeon to St. Luke's Hospital.

EYE AND EAR INFIRMARY.—This institution makes ample and special provision for the study of diseases of the Eye and Ear.

DISPENSARIES OF THE CITY.—These charities, which afford a wide field for practical observation, are also without charge.

PRACTICAL ANATOMY.—The period during which students will be admitted to the dissecting-room will occupy about five months, commencing in October, and terminating on the first day of March following. During the month of October, the room will be open from 8 o'clock A.M. to 5 o'clock P.M., when the Demonstrator of Anatomy will be in regular attendance. During the months of November, December, January, and February, it will be open till 10 o'clock P.M. The students, on the payment of the Demonstrator's fee (five dollars), will be entitled to all the privileges of the dissecting-room, and will likewise be furnished with soap and towels for washing. No extra charges will be made, except for the injection of subjects, and it will always be optional with the students to have them injected or not.

MUSEUMS, APPARATUS, ETC., ETC.—The Anatomical and Surgical Museums are rich in preparations of practical value. They contain the extensive collection of Professors Mott, Bedford, Post, and Van Buren. The Professor of Chemistry has procured a chemical and philosophical apparatus, adapted to the illustration of a complete course of general and medical chemistry. He is constantly adding to this collection, and is in possession of the requisites for thorough instruction in his department. The collection of instruments for the surgical chairs includes everything that is valuable, embracing all the recent improvements. The Professor of Materia Medica and Therapeutics has collected a herbarium of the choicest specimens. The collection in materia medica is also very complete. In addition, he possesses an extensive collection of drawings all made under his own immediate supervision. These paintings are executed upon an enlarged scale, and accompanied by other medical floras, representing the plants of their natural size. The Professor has also added to the collection his cabinet of minerals. The collection of preparations belonging to the Professor of Obstetrics, together with a complete apparatus for the illustration of every portion of his course, will enable him to be thorough in his demonstrations. The lectures of the Professors of Anatomy and Surgery are extensively illustrated by a series of enlarged paintings, drawings, and diagrams, in addition to dissections and preparations.

FACULTY PRIZES—MOTT-MEDALS.—These Medals will be given to candidates as follows: One of Gold, one of Silver, one of Bronze. The Gold Medal to the candidate who shall prepare the best dried Anatomical or Anatomico-Surgical preparation. The Silver Medal to the second best of that description. The Bronze Medal to the candidate who shall furnish the best book of recorded cases, and remarks of the Professor, of either of the Surgical Clinics. Candidates for Graduation, as well as first and second course students, shall compete for these Medals. The preparations shall belong to Dr. Mott's Museum, be labelled with the name of the maker, and entered on the catalogue. The volume of cases shall also belong to, and be deposited, in the Museum. One of the Faculty will be associated with Dr. Mott in the adjudication of the Medals. The Medals to be announced by the Chancellor, and presented to the successful candidates, at the Spring Commencement of the College. The medals not to be awarded except the specimens presented are of sufficiently good character.

Metcalfe Prizes.—Professor Metcalfe will give two prizes for the first and second reports, in order of merit, of cases occurring at his College Clinics during the session.

Van Buren Prizes.—The Professor of Anatomy offers two prizes for the best dissections by members of the Dissecting Class, on the recent subject. Conditions, and further explanation, given in full during the session.

Graduation.—The examination for the Degree will commence towards the close of the session, and will be continued daily until all the candidates shall have been examined. The following are the requisites for the diploma. The candidate must be 21 years of age. He must have attended two courses of medical lectures; one of which must have been delivered in the medical department of the University of New York. He must have attended a course of Practical Anatomy in the Dissecting Room. The candidate must have studied medicine for three years (the terms of attending lectures being included in these), under the direction of a respectable medical practitioner. He must write a medical thesis, either in the English, Latin, or French language. Two Commencements take place annually in the University, at either of which candidates who have complied with the above requisitions may graduate. The first takes place early in the month of March, and the other about the end of June.

Fees.—Full Course of Lectures, $105; Matriculation Fee, $5; Fee for instruction by the Demonstrator, $5; Graduation Fee, $30.

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.—FACULTY.

Horace Green, M.D., LL.D., Emeritus Professor of Theory and Practice of Medicine.
John M. Carnochan, M.D., Professor of Clinical and Operative Surgery.
Benj. I. Raphael, M.D., Professor of the Principles and Practice of Surgery.
Charles A. Budd, M.D., Prof. of the Theo. and Prac. of Midw.
A. Jacobi, M.D., Prof. of Infantile Pathol. and Therapeutics.
Rufus K. Browne, M.D., Professor of Physiology and Microscopic Anatomy.
E. Noeggerath, M.D., Prof. of Clin. Mid. and Dis. of Wom.
J. V. C. Smith, M.D., Professor of Anatomy.
Wm. F. Holcomb, M.D., Prof. of Ophthalmic and Aural Sur.
Samuel R. Percy, M.D., Professor of Materia Medica, Therapeutics, and Medical Jurisprudence.
C. C. Cox, M.D., Prof. of Theory and Practice of Medicine..
Charles A. Seely, A.M., Prof. of Chemistry and Toxicology.
James E. Steele, M.D., Demonstrator of Anatomy.
W. Leon Hammond, M.D., Assistant to the Professor of Practice of Surgery.

The Twelfth Annual Course of Lectures will commence on the 21st October, 1861, and will continue until the first week of March, 1862. A Preliminary Course, embracing subjects not included in the regular Course, commenced on the 16th day of September, and continues until the Winter Course begins.

Clinical Advantages.—There are constantly in public hospitals about *three thousand* patients, suffering under all varieties of disease, and requiring both medical and surgical treatment; and any particular disease or department of medicine can be studied separately and thoroughly. One hospital alone can furnish about two hundred patients, of both sexes, suffering under every form of syphilis; another, from thirty to forty cases of coxalgia and Pott's disease; another, all varieties of accidental injuries, as fractures, dislocations, and gunshot wounds; another has annually about seven hundred midwifery cases; while the diseases consequent on the immense emigration landing at this port from all parts of the world, offer to the attentive observer, European and Southern diseases, as well as those peculiar to this locality. Diseases of the uterus, diseases of the throat, diseases of the eye, diseases of the skin—in fact, diseases of any particular tissue or organ—can be studied with every possible advantage.

The Emigrants' Hospital, on Ward's Island, the largest of these institutions, contains about 1,500 beds, and during the last year furnished hospital accommodations for more than 15,000 patients. Among these are found all varieties of disease, surgical, medical, and obstetric, with a very large proportion of those peculiar to children (not less than 1,800 being annually treated), and of diseases of women in the puerperal state—701 women having been delivered in the obstetric division of this hospital during the past year. Ample opportunities are offered for acquiring a knowledge of percussion and auscultation, and of general internal pathology. Of this institution Professor Carnochan is Surgeon-in-chief, and has constantly under his charge a large number of patients, laboring under all forms of surgical disease. He is always able to illustrate his lectures at the college, by reference to the cases in the hospital. Operations are constantly necessary; and to these as well as to the clinics at the hospital, the students of the College are admitted.

The students of this college are admitted to the following institutions: Blackwell's Island Hospitals, Bellevue Hospital, the New York Hospital, the Jews' Hospital, Nursery Hospital, Randall's Island; the Ophthalmic Hospital, and the Eye Infirmary.

These great hospitals include but a small share of the public provision made in this great city for the sick poor. The five Dispensaries cover the out-door poor of the entire city.

Besides, the "*German Dispensary of the City of New York*" will offer opportunities of studying infantile pathology, under the daily supervision of Prof. Jacobi. Prof. Holcomb is one of the attending physicians of the Demilt Dispensary.

Clinics at the College.—Mondays and Thursdays, Surgical, by Profs. Raphael and Carnochan. Tuesdays and Fridays, Diseases of Children, by Prof. Jacobi. Tuesdays, Diseases of the Eye and Ear, by Prof. Holcomb. Wednesdays, Diseases of Women, by Profs. Noeggerath and C.A. Budd. Saturdays, Medical, by Prof. Cox.

Infantile Pathology and Therapeutics.—This is the first distinct Chair in the United States established for this important branch of medical science and practice. Prof. Jacobi proposes to teach his branch, both by didactic lectures and clinical instruction, to such an extent as to fully enable the students, after having completed their course, both to make a correct diagnosis of diseases of children, and to treat them satisfactorily. Opportunities will be afforded to each student to treat the children presented at the clinic, under the supervision of the professor, and by attending them at their homes; thus deriving practical advantages not otherwise attainable.

Practical Anatomy.—The rooms for dissection are more capacious and better arranged, lighted, ventilated, and warmed, than any other of which the Trustees have knowledge. The accommodations of the School in reference to the teaching of Anatomy, are of the very highest class (New York possessing an abundance of anatomical *material* not to be compared with any other city in the Union); and the Trustees anticipate the admiration of all who inspect carefully their arrangements for this purpose.

The Fall Course of Lectures commenced on Monday, September 16th, and continues until the commencement of the Regular Term. This Course will be gratis to Students of the College who intend making a full Winter Course, and will be as follows:—

On Amputations, Mondays, at 12 m., by Prof. Carnochan; on Gunshot wounds, Tuesdays, at 12 m., by Prof. Raphael; on the Anatomy of the Female Pelvis and Fœtal Head, Thursday, at 11 A.M., by Prof. C. A Budd; on Infantile Fevers, Wednesday, at 12 M., by Prof. Jacobi; on the Diagnosis of Uterine Diseases, Friday, at 12 M., by Prof. Noeggerath; on the Use of the Ophthalmoscope, Friday, at 11 A.M., by Prof. W. F. Holcomb.

Faculty Prizes.—There are annually distributed to the successful competitors among the Graduating Class of this College, two prizes for the best Theses. It is but right to add, that these prizes were created by Alumni of the College.

Fees.—Full Course of Lectures, $105. Matriculation Fee, $5. Fee for Demonstrator, $5. Fee for Final Examination, $30. Thirty Dollars are to be paid previous to the final examination, which is irrespective of graduation. In case the candidate is not recommended for the degree of Doctor of Medicine, he will be entitled in six months afterwards to another examination, for which no fee will be exacted. Graduates of three years' standing, of other institutions where the requirements are the same as at this, will be admitted to attend all the lectures on paying the matriculation fee. Two full Courses, one being in this College, will admit to a Third Course on paying Matriculation Fee. Applications for less than a full Course may be arranged with the Dean.

Graduation.—At the Annual Commencement, in March, the Degree of M.D. will be conferred, which, by the law of the State, conveys every right and privilege of the profession to teach and practise medicine.

Candidates must have attended two full courses of lectures in some regular Medical College, the last of which must be in this College. They must be twenty-one years of age, and have studied medicine for at least three years, under direction of some regular physician. They must each write a Thesis on some professional subject, and deposit it with the Dean, with certificates of age, time of study, good moral character, and proof of having passed their two collegiate courses of instruction. They must also pass a satisfactory examination *before seven of the Faculty.*

BELLEVUE HOSPITAL MEDICAL COLLEGE.

Isaac E. Taylor, M.D., President.
Benjamin W. McCready, M.D., Secretary.
R. Ogden Doremus, M.D., Treasurer.
James R. Wood, M.D., Professor of Operative Surgery and Surgical Pathology.
Frank H. Hamilton, M.D., Professor of Military Surgery, Fractures, and Dislocations.
Lewis A. Sayre, M.D., Professor of Orthopœdic Surgery.
Alexander B. Mott, M.D., Professor of Surgical Anatomy.
Stephen Smith, M.D., Professor of the Principles of Surgery.
Isaac E. Taylor, M.D., George T. Elliot, M.D., B. Fordyce Barker, M.D., } Professors of Obstetrics and Diseases of Women and Children.
Benjamin W. McCready, M.D., Professor of Materia Medica and Therapeutics.
Timothy Childs, M.D., Professor of Descriptive Anatomy.
Austin Flint, M.D., Professor of the Principles and Practice of Medicine.
R. Ogden Doremus, M.D., Prof. of Chem. and Toxicology.
Austin Flint, junior, M.D., Professor of Physiology and Microscopic Anatomy.
Charles D. Phelps, M.D., Demonstrator of Anatomy, and Curator of the Hospital Museum.
N. R. Moseley, M.D., Prosector to Chair of Surgical Anat.
Sylvester Teats, M.D., Prosector to Chair of Operative Surgery, and Surgical Pathology.

The Trustees and Faculty of the Bellevue Hospital Medical College announce, with great pleasure, the establishment of this institution on a basis which they feel assured will command the approbation and warm interest of the medical profession of this country.

Organization.—The College was organized early in April, 1861; the departments of instruction instituted; a corps of thirteen Professors appointed; and measures taken for the speedy erection of a suitable college building within the spacious and beautiful hospital grounds. Instruction has already been inaugurated in the College by a course of lectures on Military Surgery, by Prof. Hamilton, and a series of lectures, with demonstrations, by Prof. Wood, on subjects of importance to army surgeons preparing for the field. These lectures were given in the latter part of April and the early part of May, and were attended by a class of over two hundred medical students and practitioners.

The objects which led to the establishment of this College will guide the Trustees and Faculty in its management. These objects are, the development of the vast resources of the Bellevue Hospital, together with the associated public charities, and the complete application of these resources to the various branches of medical instruction. The plan is to combine, to the fullest extent, thorough didactic with demonstrative teaching. This is to be done in the most effectual manner only by establishing medical schools in connexion with large hospitals. Some of the most distinguished of the European schools are thus connected, and this plan has recently been adopted in this country, but in no other instance on a scale so extensive as by the union of a Medical College with the Bellevue Hospital. The lectures in all the departments being given in the Hospital or within the hospital grounds, loss of time in going to and from the hospital will be saved to the student; there will be no encroachments of didactic and clinical instruction upon each other, but, on the contrary, arrangements will be made to secure to each its appropriate relative claims. The Professors in all the practical branches being either Visiting Physicians or Surgeons to the Hospital, subjects pertaining to Surgery, Obstetrics, Therapeutics, and the Practice of Medicine, can be amply illustrated by cases in the hospital wards simultaneously with their consideration in the lecture room.

Clinical Advantages.—The annual report for the year 1860 shows that during the year *eleven thousand four hundred and eleven* patients were treated in this Hospital. At the end of the year *nine hundred and twenty-six* patients remained in Hospital under treatment. The number of discharges during the year was *nine thousand four hundred and seventy-two;* and the number of deaths *one thousand and thirteen.* The Hospital receives medical and surgical cases of all descriptions, excepting the contagious eruptive fevers, cases of every variety of accident, and women in pregnancy. During the year 1860, the number of births amounted to *four hundred and seventy-four.* During the same year *six hundred and two* police and accidental cases were received, and *one hundred and forty-nine* coroner's cases. Of the thirteen Professors composing the Faculty of the College, all save three are connected with the Hospital as Visiting Physicians or Surgeons. Medical students are admitted to the hospital wards daily during the hours appropriated to clinical instruction. Surgical operations are performed in presence of the class. Abundant opportunities are afforded for being present at cases of labor, and of witnessing obstetrical operations when these are required. Autopsies may be made before the class when desired, the dead-house containing a spacious lecture room designed specially for this purpose. In carrying out the plan of combining didactic with demonstrative teaching to the fullest extent, the Professors in the different departments will generally be able to illustrate important subjects as they occur in the regular courses of instruction, by cases selected from the hospital wards, and by post-mortem examinations. The phenomena of disease, as manifested in the living and the dead body, will be demonstrated in immediate connexion with the consideration of the subjects to which they relate.

The Blackwell's Island Hospital, which has recently been erected, is a splendid edifice, nearly as large as the Bellevue Hospital. It contains at the present time about a thousand patients, a large proportion of whom are affected with chronic diseases. Here are collected several hundred cases of syphilis, presenting all the stages and multiform phases of this disease in both sexes. Chronic affections of the chest are numerous. This Hospital has lately been placed under the charge of the Medical Board of Bellevue Hospital, and is, in like manner, open for clinical instruction. Students attending the Hospital at Bellevue will have the privilege of attendance at the institutions on Blackwell's Island without expense—the means of conveyance by steamer being provided by the Commissioners.

The Small-Pox Hospital is situated on Blackwell's Island. This Hospital received *three hundred and twenty-three cases* during the last year. Students desiring to observe cases of small-pox will here have an abundant opportunity.

Museum.—The Hospital Museum, together with the large private collections of Prof. Wood and other members of the Faculty, will be available for instruction. The additions being constantly made to the Hospital Museum will ere long make this inferior to none other in the number and variety of morbid specimens.

Botanical Garden.—Arrangements have been made for the establishment of a Botanical Garden on Blackwell's Island.

Practical Anatomy.—The study of Practical Anatomy can be pursued to any extent. This study having been legalized in the State of New York, and amply provided for by law, there will be no lack of material, which will be furnished to the student at a trifling expense. Dissections will be superintended by the Demonstrator of Anatomy, under the direction of the Professor of that Department. Commodious, well-lighted, and well-ventilated dissecting-rooms will be provided, together with everything requisite for the convenience and comfort of the student. Dissections may be prosecuted during the preliminary term, and during the whole of the regular term.

Prizes are offered by two members of the Faculty, Professors Wood and Mott, for the best preparations relating to Surgical Anatomy, to be competed for by students in any of the Medical Schools of New York and Brooklyn. The prizes offered by Prof. Wood are $50, and a diploma, for the best preparation, and $25, with a diploma, for the one ranking second in excellence. These prizes are adjudged by the Professors of Surgery in the different schools.

The prize offered by Prof. Mott is a complete case of surgical instruments of the value of $100, for the best preparation.

Preliminary and Regular Terms.—The *preliminary term* will commence on Wednesday, Sept. 18th, 1861, and continue to the beginning of the regular term, viz., four weeks. The *regular term* will commence on Wednesday, Oct. 16th, 1861, and end early in March, 1862.

Preliminary Term.—The arrangements for lectures, etc., during the preliminary term, are designed to render this term not merely a nominal, but an actual extension of the period of instruction. While it is not deemed advisable at present to require attendance during this term, students are earnestly solicited to attend, and sufficient inducements, it is hoped, will be found in the amount and practical importance of the instructions which will be provided. Clinical teaching in Surgery, Medicine, and Obstetrics, will be as full during the preliminary as during the regular term, and, in addition, at least three lectures will be given daily by members of the Faculty. The subjects of the lectures have been selected with reference to their importance in a practical point of view.

Among the subjects which will be taken up during the preliminary term, are, Organic Affections of the Uterus, by Prof. Taylor; Uterine Displacements, by Prof. Barker; Inflammatory Diseases of the Uterus and Appendages, by Prof. Elliot; the Thoracic Viscera, by Prof. Childs; Auscultation and Percussion, by Prof. Flint; Syphilis, by Prof. Hamilton, Surgical Affections of the Genito-Urinary Apparatus, by Prof. Wood; Endosmosis and Exosmosis, and their Practical Applications, by Prof. Doremus.

In addition to the preliminary and regular terms, a course of instruction will be given during the spring and summer months. Seasonable notice will be given of the subjects, etc., of this course.

Regular Term.—During the *regular term*, the lectures will be so arranged as not to interfere with attendance in the hospital wards. Ample time will be allowed for accompanying the Visiting Physicians and Surgeons in their daily rounds, attending clinical lectures, and witnessing surgical operations in the hospital amphitheatre, without compromising didactic instruction in any of the branches. Clinical and demonstrative teaching constituting the great feature of this College, the arrangements will be such as to render the immense resources of the Hospitals available to the student to the fullest possible extent.

Graduation.—The requirements for graduation in this College are—twenty-one years of age; three years' study with a regular and respectable practitioner of medicine (or practitioners), inclusive of the time of attendance at medical lectures; attendance on two full courses of lectures, the last being in this College; proper testimonials of character; an acceptable thesis in the handwriting of the candidate, and a satisfactory examination in each of the departments of instruction. The Faculty of this College consisting of thirteen Professors, it is proper to state that candidates for graduation will be examined in Surgery and Obstetrics, respectively, by one of the Professors appointed in each of these departments.

Fees.—The aggregate fees for tickets to all the lectures during the preliminary and regular terms are $105. Tickets for one, or any number of the departments of instruction, may be taken out separately, the fees being proportionate to the number taken. The fee for a ticket admitting to all the lectures during the preliminary term is $10. This sum will be deducted from the aggregate fees for the whole session ($105) if tickets to the lectures during the preliminary and regular terms are taken. Matriculation fee, $5; Graduation fee, $30; Demonstrator's ticket, $5. The hospital ticket will admit the student not only to Bellevue Hospital, but to the Hospital on Blackwell's Island, and other charities under the jurisdiction of the Commissioners. Students who have attended two full courses of lectures in other accredited schools will be admitted to all the lectures for $50. Students who may attend two full courses in this College, or who attend one full course in this College, and have attended one full course in some other accredited school, will be required to matriculate only. Payment of the fees will in all cases be required, and tickets must be taken out at the commencement of the term.

Appointment of Resident Physicians and Surgeons in the Bellevue and Blackwell's Island Hospitals.—The Hospital Staff at Bellevue and Blackwell's Island Hospital includes twenty-two resident Physicians and Surgeons, who are appointed annually, after an examination and recommendation by the Medical Board of the Hospital. The resident Physicians and Surgeons are provided with comfortable quarters in the Hospital, and receive a salary sufficient for their support.

Special Courses of Instruction.—In order to meet the wishes of medical practitioners and students who may desire fuller or more minute instruction in certain subjects than can enter into the regular courses of lectures, special courses will be given during the session, by members of the Faculty, to private classes. Prof. Hamilton will give private instruction in the application of splints and bandages. Prof. Flint will give practical lessons in auscultation and percussion. Prof. Doremus will form classes for practical exercises in Toxicology. Instruction in Microscopy will be given by Prof. Flint, Jr.

The terms, etc., for these special courses will be announced during the session.

LONG ISLAND COLLEGE HOSPITAL, BROOKLYN.

Austin Flint, M.D., Practical Medicine and Pathology.
Frank H. Hamilton, M.D., Surgery.

James D. Trask, M.D., Obstetrics.
R. Ogden Doremus, M D., Chemistry and Toxicology.
Joseph C. Hutchison, M.D., Surg. Anat. and Operat. Surg.
John C. Dalton, M.D., Physiology and Microscopic Anat.
DeWitt C. Enos, M.D., Anatomy.
Edwin N. Chapman, M.D., Mat. Med. and Therapeutics.
J. G. Johnson, MD., Demonstrator.

Regular lectures commence about the middle of March, and continue sixteen weeks.

Clinical Instruction.—Ample opportunities for clinical observation and teaching are afforded in the hospitals and dispensaries with which Brooklyn is liberally provided. Brooklyn City Hospital, one of the finest and best appointed in the country, is open to medical men and students without charge.

Graduation.—The candidate for graduation must have studied medicine for three years under the direction of a regular practitioner, must be twenty-one years of age, of good moral character, have attended two full courses of lectures, of which one must be at this institution, and submit to the faculty a thesis in his own handwriting on some medical subject.

Fees.—Fees for the whole course, including Matriculation fee, $100; Single tickets (exclusive of Matriculation fee of $5) each, $12 50; Graduation fee, $20; Demonstrator's ticket, $5; Hospital tickets, gratuitous. Regular physicians will be admitted to all the lectures on payment of $5 (the amount of the Matriculation fee).

GENEVA MEDICAL COLLEGE.

John Towler, M.D., Dean and Registrar, Professor of Chemistry and Pharmacy.
James Hadley, M.D., Emeritus Professor of Chemistry and Pharmacy.
Frederick Hyde, M.D., Professor of Principles and Practice of Surgery.
George Burr, M.D., Professor of General and Special Anatomy.
Caleb Green, M.D., Professor of Physiology and Pathology.
Hiram N. Eastman, M.D., Professor of the Practice of Medicine and Materia Medica.
Joseph Beattie, M.D., Professor of Obstetrics, Diseases of Women and Children, and Medical Jurisprudence.
Lyman W. Bliss, M.D., Demonstrator of Anatomy.

The session of 1861–62 will begin on Wednesday, the 2d day of October, 1861, and continue sixteen weeks. Through the liberality of the Legislature, and from the College and Faculty endowments, between twenty-five and thirty thousand dollars have been expended in the purchase of Museum, Library, and Apparatus, and in the erection of one of the best arranged and most commodious college buildings in the United States.

The Anatomical Museum has been carefully selected, both in this country and in Europe, and is alike rich in healthy and morbid specimens. This collection, with the abundant supply of recent anatomical material always on hand, will afford ample means for the study of both healthy and pathological anatomy.

Rules and Regulations.—Every student, previous to his attendance upon lectures, shall wait upon the Dean, in order to register his name, residence, and the name of the practitioner with whom he has pursued his medical studies, and shall pay a matriculation fee of eight dollars. He is recommended at the same time to take a general ticket, by paying $32, which will entitle him to the ticket of each professor. Otherwise he shall obtain them within ten days after the commencement of lectures in any department from the respective professors. Pupils who have attended two full courses of medical lectures, one of which courses has been at this college, are admitted without the payment of lecture fees. Those who have attended two full courses at other medical institutions will be admitted to their first course at this college for one-third of the lecture fee in addition to the matriculation fee.

Graduation.—The candidate for the medical degree must be twenty-one years of age, of good moral character, have attended two full courses of medical lectures, the last at this institution, and must exhibit satisfactory evidence of having prosecuted the study of medicine for three years under the direction of some respectable physician. He must also undergo an examination by the professors, in their respective branches, in the presence of the Board of Curators, and present—and defend when required—a dissertation on some medical subject, composed and written by himself.

Fees, payable in advance.—Matriculation, $3. Tickets for the whole Course, $50. Graduation, $20. Demonstrator's Ticket, $3. Anatomical Material, $5.

ALBANY MEDICAL COLLEGE.

Alden March, M.D., Principles and Practice of Surgery.
James McNaughton, M.D., Theory and Practice of Medicine.
James H. Armsby, M.D., Descriptive and Surgical Anatomy.
Howard Townsend, M.D., Materia Medica and Physiology.
Charles H. Porter, M.D., Chemistry and Medical Jurisprudence.
J. V. P. Quackenbush, M.D., Obstetrics and Diseases of Women and Children.
F. L. R. Chapin, M.D., Demonstrator of Anatomy.

The Annual Course of Lectures at this Institution commenced on the first Tuesday of September, 1861, and continues sixteen weeks. Degrees are conferred at the close of the term, and also in June.

The Museum contains all the morbid specimens accumulated during a long course of surgical practice by Professor March, and Prof. McNaughton's valuable collections, accumulated during twenty years' connexion with the College of Physicians and Surgeons of the Western District. Also the extensive and valuable collections of Prof. Armsby.

The Library numbers nearly 5,000 volumes, a portion of which is appropriated to the use of students, during the lecture term. No fee is charged for the use of books to those who have matriculated. Students are advised to furnish themselves with one good text book in each department.

The Working Laboratory, for instruction in Practical and Pharmaceutical Chemistry, will be open during the term. The course of instruction includes the preparation of compounds used in medicine; the determination of the purity of medicines; a qualitative examination of the principal bases and acids, including a systematic course for their detection; the examination of blood, urine, &c., &c., particular attention being paid to the *detection of poisons*. Laboratory ticket, $10.

Practical Anatomy.—The Dissecting Rooms are open during the term, and ample opportunities are furnished for the pursuit of *Practical Anatomy*. The Dissecting ticket is $5. An abundant supply of material for dissection is furnished on the most reasonable terms.

Clinical Advantages.—The Saturdays of every week are devoted to surgical operations and clinical instruction, and in this way the students have an opportunity of witnessing a great variety of medical and surgical cases. Indigent persons who require advice or surgical operations are gratuitously attended to, if they present themselves before the class on Saturday.

A large and commodious Hospital has been established nearly opposite the College, provided with a spacious Lecture Room, Dispensary, and every requisite for the study of Clinical Medicine and Surgery, to which students are admitted, free of charge. Post mortem examinations, surgical and medical cases in great number and variety, are here exhibited to the class.

Graduation.—The candidate must be twenty-one years of age, and exhibit certificates from a physician or surgeon duly authorized by law to practise his profession, that he has studied medicine and surgery under his instruction during a term of three years. He must have attended two full courses of lectures, the last of which at this Institution. He must deliver to the Registrar, six weeks before the end of the term, a thesis, written by himself, on some medical subject, and be prepared to defend it at his examination. The thesis must be written on paper of uniform size, a specimen of which may be seen by applying to the Registrar. He must pass a satisfactory examination on the several branches of medicine and surgery. The Graduation fee is $20, which must be paid to the Registrar before the candidate can be admitted to an examination.

Fees.—The Matriculation fee is $5. The fees for a full Course, $65. Perpetual ticket, $110. The fees for each of the branches are as follows:—Students who have attended two full courses of lectures at other medical institutions, will be required to pay $10, and the matriculation fee. Students who have attended two full courses of lectures at *this College*, will be required to pay only the matriculation fee. Graduates of this Institution have perpetual free admission. Graduates of other medical schools will be admitted by paying the matriculation fee.

UNIVERSITY OF BUFFALO.—MEDICAL DEPARTMENT.

Charles B. Coventry, M.D., Emeritus Prof. of Physiology, and Medical Jurisprudence.
James P. White, M.D., Prof. of Obstetrics.
George Hadley, M.D., Prof. of Chem. and Pharmacy.
Thomas F. Rochester, M.D., Prof. of Medicine.
Edward M. Moore, M.D., Prof. of Surgery.
Sandford Eastman, M.D., Prof. of Anatomy.
Joshua R. Lothrop, M.D., Lecturer on Materia Medica.
William H. Mason, M.D., Prof. of Phys. and Micros. Anat.
Charles P. Fanner, M.D., Demonstrator of Anatomy.

The Annual Course of Lectures in this Institution commences on the first Wednesday in November, and continues sixteen weeks. The Dissecting rooms will be opened on the second Wednesday in October.

Clinical Lectures at the Buffalo Hospital throughout the entire terms, by Professors Moore and Rochester.

Fees.—The fees for the tickets of all the Professors, inclusive of the hospital ticket, amount to $70. Matriculation fee (annually), $5. Students who have attended a full course of Lectures in this or in any other institution, will be received on payment of $50. The fee for those who have attended two courses elsewhere is $25. The Alumni of this College, and all who have attended two full courses of the institution, are entitled to all the tickets on payment at the matriculation fee of $5. Graduation fee, $20. Graduates of any respectable college, after three years, will receive all the tickets on payment of the matriculation fee. Practitioners of five years' standing, who have attended one course of lectures in a respectable institution, will be received for $25. The fee for the ticket of the Demonstrator of Anatomy, is $5, which is optional, except for one term before graduation.

Provisions for Gratuitous Instruction.—Deserving students of medicine who are unable to afford the expense of medical instruction, are invited to make application to the Dean, to be received without the payment of fees to the professors. Applications will be considered strictly confidential. No one need be deterred from applying for the benefit of this provision, by the apprehension that it will ever be known by any of his fellow-students. The object of this provision is to place the courses of instruction in this Institution within the reach of all who may desire to avail themselves of its advantages, but who, from their limited resources, would be led, otherwise, to resort to institutions in which teaching is gratuitous.

Those who are admitted to gratuitous instruction will be expected to pay, in addition to the matriculation fee of five dollars, the sum of twenty dollars, which will be applied to the expenses of the University. They will receive the hospital ticket without further charge.

OHIO.

MEDICAL COLLEGE OF OHIO.

M. B. Wright, M.D., Prof. of Obstetrics and Diseases of Women and Children.
Geo. C. Blackman, M.D., Prof. of Surgery.
James Graham, M.D., Prof. of Practice of Medicine.
W. W. Dawson, M.D., Prof. of Anatomy.
Jas. F. Hibberd, M.D., Prof. of Physiology and Pathol.
J. C. Reeve, M.D., Prof. of Materia Medica.
Charles O'Leary, M.D., Prof. of Chemistry and Toxicology.
John S. Billings, M.D., Demonstrator of Anatomy.
Charles Thornton, M.D., Prosector to Professor of Surgery.

The regular course of lectures will commence on the 22d day of October and continue until the 1st of March. From the 1st of October to the commencement of the term, clinical lectures will be delivered at the Commercial, St. John's, and St. Mary's Hospitals. Professor Blackman being surgeon to the above institutions, and Professor Graham being physician to the Commercial and St. John's Hospitals, have at their disposal the most varied and interesting clinical material. Clinical lectures will be delivered at the Commercial Hospital on Wednesday and Saturday throughout the session. The Hospital ticket is $10, but is included in the Professors' tickets. The dissecting rooms will be open on the first of October. The numerous cases of diseases of the eye presenting at the Commercial, St. John's, and St. Mary's Hospitals, enable the Professor of Surgery to exhibit to the class every variety of ophthalmic disease. Especial attention is also given by him to this department in the didactic course. Arrangements have been made by the Professor of Obstetrics by which each candidate for graduation will be able to attend one or more cases of delivery. A special clinic on the diseases of women and children will be held at the college every week.

Graduation.—Three years' study, under the guidance of a reputable instructor; attendance upon two full courses of lectures, the last in this Institution. Graduates of the school will be admitted free to all the lectures. The graduates of other schools will be required to pay the Matriculation and Hospital tickets. The President of the Ohio State Medical Society, with other physicians whom he may select, will be present by invitation of the faculty, at the final examination of the candidates.

Fees.—Matriculation fee (paid once only), $5; Professors' Tickets, including Hospital, $105; Demonstrator's Ticket, $6; Graduation fee, $25.

CLEVELAND MEDICAL COLLEGE.

John Delamater, M.D., LL.D., Emeritus Professor of Midwifery, and Diseases of Women and Children.
Jared P. Kirtland, M.D., Prof. of the Prin. and Prac. of Med.
J. Lang Cassels, M.D., LL.D., Prof. of Chem. and Toxicol.
Proctor Thayer, M.D., Prof. of Anatomy and Physiology.
Gustave C. E. Weber, M.D., Prof. of the Principles and Practice of Surgery.
H. K. Cushing, M.D., Prof. of Midwifery, Diseases of Women and Children, and Medical Jurisprudence.
Alleyne Maynard, M.D., Prof. of Materia Medica, Therapeutics, and Physical Diagnosis.
John E. Darby, M.D., Demonstrator of Anatomy.

The next Annual Course of Lectures will commence on the first Wednesday of November, and continue sixteen weeks. The Lectures are so arranged that six are given daily. Wednesdays are devoted to Medical and Surgical Cliniques.

The Institution possesses large and valuable museums of special and morbid anatomy, and all the recent discoveries in physiology and anatomy are demonstrated, and their practical application illustrated.

The Chemical Course is rendered full and effective by the extent and completeness of the Apparatus, which is adequate to the demonstration, not only of the principles of chemistry proper, but also of caloric, light, electricity, galvanism, magnetism, electro-magnetism, pneumatics, etc. This course also embraces thorough instruction in toxicology.

The principles of Operative Surgery are exemplified by the aid of a large collection of instruments and apparatus.

Access to a Library, consisting of about one thousand volumes, is enjoyed by students during their attendance on the lectures.

Practical Anatomy.—Provision is made for the prosecution of practical anatomy on the most liberal terms.

Fees.—The fee for the tickets of all the Professors is $60. When desired, a promissory note, payable in twelve months, for $70, and signed jointly with some responsible person—the responsibility to be certified by a Justice of the Peace and Judge resident in the county—will be received in place of money at the time. Medical graduates, and those who have attended two full Courses at this Institution, are entitled to free admission to all the Lectures, by paying the matriculation fee only. Good board, including room, lodging, fuel, and light, may be obtained at prices varying from $2 to $3 per week.

Graduation.—The candidate for the degree of Doctor of Medicine must have pursued medical studies for three years, attended two full courses of medical lectures—the last of which must have been at this Institution—one course of practical anatomy, and composed and deposited with the Treasurer, at least three weeks previous to the close of the Lecture term, a satisfactory thesis on some medical subject, together with the sum of twenty dollars as a graduating fee—the thesis and graduating fee to be returned to him, in case he fail of obtaining the degree. He must also produce satisfactory testimonials of good moral character, and sustain an examination by the Professors, a majority of the votes given in a joint ballot being necessary to his recommendation for a degree. Bachelors of Arts may be graduated after two years' membership. Gentlemen who have been reputably engaged in the practice of medicine for four years, may be admitted to an examination for the degree, after having attended a single course of lectures—the practice having preceded the lectures—provided only that all other pre-requisites have been complied with.

STARLING MEDICAL COLLEGE, COLUMBUS.

S. M. Smith, M.D., Prof. of Theory and Practice.
Francis Carter, M.D., Prof. of Obst. and Dis. of Wo. and Ch.
John Dawson, M.D., Prof. of Anatomy and Physiology.
J. W. Hamilton, M.D., Prof. of Surgery.
S. Loving, M.D., Prof. of Mat. Med. Therap. and Med. Jur.
Theo. G. Wormly, M.D., Prof. of Chemistry and Toxicology.
R. N. Barr, M.D., Demonstrator of Anatomy.
S. M. Smith, M.D., Dean.

The next session of Starling Medical College will commence on Thursday, the 23d of October, 1861, and will continue until the first of March, 1862. The course of instruction consists of lectures in the different departments, with illustrations suited to each; and clinical lectures on Wednesdays and Saturdays by the Professors of Surgery and Practice at the College, and at the Hospital of the County Infirmary.

Practical Anatomy.—The Dissecting Rooms will be open on the 1st of October, for the study of Practical Anatomy, under the direction of the Demonstrator, on application to whom *material* will be furnished, at moderate expense, *and in no other way.*

Graduation.—Three full years' study with some respectable practitioner of medicine, including lectures; attendance upon two full courses of medical lectures, in respectable medical Institutions, regularly established, one of which shall be in this Institution; attendance upon at least one course of practical dissections; a thesis upon some medical or surgical subject, of the student's own composition and writing, which must be read and defended when called for; and the passing successfully an examination before the Faculty and Officers of the Institution. Certificates of time of study or practice, and of character, will be required; and they should be full, formal, and explicit. Regular medical graduates, clergymen, and theological students, and who have already attended two courses of lectures at this Institution, will be admitted to the lectures on the payment of the matriculation fee.

Fees.—Tickets of all the Professors, $60. Matriculation Ticket (paid but once), $5. Graduation Fee, $20. Tickets for the privileges of the Dissecting Room, including the services of the Demonstrator, $8.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY, CINCINNATI—FACULTY.

P. M. Crume, M.D., Emeritus Prof. of Obstetrics.
A. H. Baker, M.D., Prof. of Surgery.
B. S. Lawson, M.D., Prof. of Medicine and Pathology.
G. R. Chitwood, M.D., Prof. of Materia Medica, Therapeutics, and Medical Jurisprudence.
J. H. Tate, M.D., Prof. of Obstetrics.
Daniel Vaughn, A.M., M.D., Prof. of Chemistry.
W. P. Thornton, M.D., Prof. of Anatomy and Physiology.
Conrad Soellheim, M.D., Demonstrator of Anatomy.

The regular course in this institution commences on the 15th of October, and closes on the last week in February, Every advantage is offered for the study of practical anatomy, and the students are allowed to tend, without charge, the Commercial Hospital.

Graduation.—The student, before matriculating, must give satisfactory evidence of having acquired a good English education; this may be done by the certificate of his teacher, or by his own composition at the time of matriculation. The candidate must give evidence of good moral character, and must be at least twenty-one years of age. He must have attended two full courses of lectures in some respectable Medical School, one of which shall have been in this College, and must exhibit his tickets, or other satisfactory evidence thereof, to the President of the Faculty. He must have studied medicine not less than three years, with a respectable practitioner—practised dissection and attended clinical instruction at least one session. He must present to the President of the College, at least a month before the end of the term, a thesis of his own composition, on some medical subject; and, at his final examination, exhibit to the faculty satisfactory evidence of his professional attainments. He must, before he receives the degree, acknowledge the right of the faculty to revoke it, should he engage in quackery, or be guilty of gross unprofessional conduct. Four years' practice will be considered as equivalent to attendance on one course of lectures, a certificate of which must be presented at the time of matriculating, or handed in with the thesis. The degree will not be conferred upon any candidate who absents himself from the public commencement, except by special permission of the faculty. The commencement for conferring degrees will take place immediately after the close of the lecture term. The ad eundem degree will be conferred on graduates of other respectable Colleges, upon passing a satisfactory examination, paying the Graduation fee, and the presentation of evidence of a good moral and professional character. Examinations will not be granted before the regular time except in cases of extreme emergency, and then to advanced students only.

Fees.—Professors' Tickets free; Matriculation, $25; Demonstrator's Ticket, $5; Hospital Ticket, $5; Graduation, $25.

PENNSYLVANIA.

UNIVERSITY OF PENNSYLVANIA—MEDICAL DEPARTMENT.

William Gibson, M.D., Emeritus Professor of Surgery.
George B. Wood, M.D., Emeritus Professor of Medicine.
Samuel Jackson, M.D., Professor of Institutes of Medicine.
Hugh L. Hodge, M.D., Professor of Obstetrics and the Diseases of Women and Children.
Joseph Carson, M.D., Professor of Materia Medica.
Robert E. Rogers, M.D., Professor of Chemistry.
Joseph Leidy, M.D., Professor of Anatomy.
Henry H. Smith, M.D., Professor of Surgery.

William Pepper, M.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine.
William Hunt, M.D., Demonstrator of Anatomy.
C. S. Bishop, M.D.,
Edward Shippen, M.D., } Surgical Demonstrators.

The session for the Medical Lectures begins early in October, and ends early in March ensuing. The commencement for conferring the degree of Doctor of Medicine, is held by a special mandamus of the Board of Trustees, during the month of March.

Graduation.—The following are the rules in force in relation to the degree of Doctor of Medicine:—The candidate must have attained the age of twenty-one years, have applied himself to the study of medicine for three years, and been, during that time, the private pupil for two years, at least, of a respectable practitioner of medicine; the candidate must also have attended two complete courses of the following lectures in this Institution:—theory and practice of medicine; anatomy; materia medica and pharmacy; chemistry; surgery; obstetrics, and the diseases of women and children; institutes of medicine. Medical students who have attended one complete course in a respectable medical school, where the attendance on two complete courses is necessary to a degree, where the same branches are taught as in this, and which is placed upon the *ad eundem* of this school, are permitted to become candidates by an attendance here for one full course; the rules of graduation being in other respects observed. They are also exempted from the payment of fees upon attending a second term. When a candidate applies to the Dean for admission, he must exhibit his tickets to prove that the above rules have been complied with. The candidate, at the time of his application, must deliver to the Dean of the medical faculty, a thesis, composed by himself, on some medical subject. This thesis is referred to one of the Professors, who shall examine the candidate upon it, and make his report thereon to the medical faculty. When a candidate is rejected, his essay will be retained by the medical faculty. The essay must be in the candidate's own handwriting, and must be written uniformly on letter-paper of the same size, the alternate pages being left blank. Bad spelling in a thesis, or evidences of a want of literary culture, will preclude a candidate from examination for a degree. A thesis may be published by the candidate if he desire it, the permission of the Professor by whom he was examined thereon being first obtained; but no alteration shall be made in such thesis without the consent of the said Professor. The voting on the case of each candidate is by ballot. Candidates who have not been successful upon a first examination, will be permitted to have a second, when all the classes have been disposed of by the faculty. The second examination will be conducted in full meeting of the Professors. The candidate shall pay the fees of graduation at the time of his examination, or before receiving notice of his success; his name may then be entered on the register of passed candidates, for the purpose of being reported to the Board of Trustees and included in the mandamus for a degree. Candidates who have passed their examination, and in other respects complied with the regulations, are to be reported by the Dean to the Provost, who will communicate such report to the Board of Trustees, in order that, if approved of by them, their mandamus be issued for conferring the degree. The degree will not be conferred upon a candidate who absents himself from the public commencement, except by special permission of the medical faculty. Graduates of medical schools, on the *ad eundem* list, by attending one complete course in this Institution, and complying with the above regulations, are put upon the same footing with students who have attended two complete courses here; that is, they may present themselves as candidates for graduation: also, if they attend a second time, the tickets will be free. Such graduates, if of five years' standing, are permitted to attend the course of lectures, upon a general ticket of admission, free of expense, except the cost of the matriculating ticket. But this general ticket does not qualify for graduation.

Fees.—Fees for the Course of Lectures, $105; Matriculation Fee (paid only once), $5; Graduating Fee, $30.

JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Robert M. Huston, M.D., Emeritus Professor of Materia Medica and General Therapeutics.
Charles D. Meigs, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children.
Robley Dunglison, M.D., Prof. of Institutes of Medicine, etc.
Joseph Pancoast, M.D., Prof. of Surgical Anatomy.
Franklin Bache, M.D., Prof. of Chemistry.
Samuel D. Gross, M.D., Prof. of Surgery.
Thomas D. Mitchell, M.D., Prof. of Materia Medica.
S. Henry Dickson, M.D., Prof. of Practice of Medicine.
William V. Keating, M.D.,* Prof. of Obstetrics and Diseases of Women and Children.
Ellerslie Wallace, M.D., Demonstrator of Anatomy.

The next session of the Jefferson Medical College will commence on the second Monday, being the fourteenth day, of October. The regular lectures will begin the day after. The session will terminate on the last day of February. Opportunities will be afforded for the prosecution of Practical Anatomy from the commencement of October.

Clinical Advantages.—The General Dispensary of the College, which the students of the College have the exclusive privilege of attending gratuitously, will be in active operation from the commencement of September. The College Clinic, connected with this, affords admirable opportunities for the student to learn the practical parts of his profession, and the proper application of the principles which he is taught from the various chairs. The clinic is richly supplied with medical and surgical cases, and throughout the session it forms a prominent, and, in the estimation of the faculty, a most important element of the educational course. The patient is examined, prescribed for, and if a surgical operation is needed, it is performed before the class The rationale of every conclusion, and of every prescription, is expounded by the clinical professor; and diagnosis, prognosis, and therapeutics are thus intimately investigated and elucidated. The lists of medical and surgical diseases exhibit the great variety of cases brought before the students. For certain cases, the faculty have provided hospital accommodations in a building in immediate connexion with the College—thus enabling the surgeons to perform not only the minor, but the more serious operations, as lithotomy, amputation, etc., before the class, without risk to the patient. The hours of attendance at the clinic of the College are so arranged as to permit the students to attend, every Wednesday and Saturday, the clinics held at the Pennsylvania Hospital, and the Philadelphia Hospital. Professor Pancoast is one of the surgeons of the former; and Professor Gross of the latter. At both these institutions, the advantages are great for the practical observation of medical and surgical cases. The city is, indeed, rich in its hospitals, infirmaries, and dispensaries, for the treatment of diseases in general. It has, moreover, institutions designed for important specialties,—for the diseases of the eye and ear, for obstetrical cases, etc., and numerous private courses are energetically conducted by competent individuals, in which practical subjects are illustrated by the examination and treatment of cases. It is obvious, however, that during the regular course of lectures the time of the student must be so much occupied with his college studies, that he can only avail himself of a part of the clinical riches with which he is so bounteously surrounded.

The Museum of the College is amply provided with materials for demonstration, and is well fitted for illustrating the various departments.

In the course on surgery, the Professor will devote several lectures to military surgery.

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* Resigned.

The examinations are so arranged as to permit the commencement for conferring degrees to be held as early in March as is practicable. There is likewise an examination of candidates for graduation during the first week of July. The degrees are conferred on the candidates who are successful at this examination at the annual commencement following.

Graduation.—The candidate must be of good moral character, and at least twenty-one years of age. He must have attended two full courses of lectures in some regular and respectable medical school, one of which shall have been in this College, and must exhibit his tickets, or other adequate evidence thereof, to the Dean of the faculty. He must have studied medicine for not less than three years, and have attended at least one course of clinical instruction in an institution approved by the faculty. He must present to the Dean of the faculty a thesis of his own composition, correctly written, and in his own handwriting, on some medical subject; and exhibit to the faculty, at his examination, satisfactory evidence of his professional attainments. If, after examination for a degree, the candidate, on ballot, shall be found to have received three negative votes, he shall be entitled to a fresh examination. Should he decline this, he may withdraw his thesis, and not be considered as rejected. The degree will not be conferred upon any candidate who absents himself from the public commencement, without the special permission of the faculty.

Fees.—The fee to each member of the faculty is $15, payable in advance, making in the whole, $105; the Matriculation fee is $5, to be paid the first session only; the fee for the diploma is $30.

VERMONT.

CASTLETON MEDICAL COLLEGE, CASTLETON, VERMONT.

Corydon L. Ford, M.D., Professor of Anatomy.
Adrian T. Woodward, M.D., Professor of Obstetrics and Diseases of Women and Children.
George Hadley, M.D., Professor of Chemistry.
William P. Seymour, M.D., Professor of Materia Medica and Therapeutics.
E. K. Sanborn, M.D., Professor of Surgery.
P. D. Bradford, M.D., Professor of Physiology and Pathology.
Charles L. Allen, M.D., Professor of Theory and Practice of Medicine.
P. Pineo, M.D., Professor of Medical Jurisprudence.

The annual course of Lectures will commence on the last Thursday of February, and continue four months.

Fees.—For a full course of Lectures, $50. Matriculation ticket, $5. Graduation fee, $16. Anatomical material supplied at a reasonable cost.

Good board can be obtained from $2 50 to $3 per week.

UNIVERSITY OF VERMONT—MED. DEPARTMENT, BURLINGTON.

Rev. Calvin Pease, D.D., President.
Samuel White Thayer, Jr., M.D., Prof. of Anatomy.
Walter Carpenter, M.D., Prof. of the Theory and Practice of Medicine and Materia Medica.
David S. Conant, M.D., Prof. of Surgery.
Joseph Perkins, M.D., Prof. of Obstetrics.
Edward Hungerford, A.M., Prof. of Chemistry.
R. Cresson Stiles, M.D., Prof. of Phys. and Pathol.

The next annual course of lectures will commence the last Thursday, being the 23d of February, and will be continued until Wednesday, June 6th.

Practical Anatomy.—An ample supply of anatomical material for dissection will be furnished students at cost. Classes will receive the personal attention of the Demonstrator of Anatomy without any additional fee.

Principles and Practice of Medicine and Materia Medica.—It is the aim of the Professor of these branches to present a faithful view of the actual state of practical medicine, to dwell upon the important art of physical diagnosis, and by the aid of plates, models, wet and dry preparations, convey correct notions of the morbid changes, occurring in different diseases. To consider the *Modus Operandi* of medicines, and discuss their mechanical, chemical, and vital modes of action, exhibit specimens of nearly all the medicinal substances recognised by the United States Pharmacopœia, and give a succinct account of their physical and chemical properties, preparation, adulteration, dose and mode of administration, and their physiological and therapeutic action.

Graduation.—There are two periods for conferring degrees; one, at the close of the annual course of lectures in June, the other at the close of the annual term of private instruction in Burlington. Candidates must have attended two full courses of lectures, one in this Institution—must have studied medicine three years with a regular physician, and have attained the age of twenty-one years. Each candidate is required to write a thesis upon some subject connected with the Science of Medicine, and deposit it with the Dean. Full and formal certificates of age, term of study, and of moral character, must be furnished.

Clinical Advantages.—On Saturday of each week a medical and surgical clinique will be held at the Medical College. Patients presenting themselves before the students at the clinique for medical and surgical treatment, are admitted free of charge. A large number of patients avail themselves of this charity annually, affording students an opportunity of witnessing a great variety of surgical operations, and the treatment of many diseases, both acute and chronic.

Fees.—At the commencement of the session, every student is required to enter his name and place of residence, and the name and place of residence of his Preceptor, in the Secretary's book, and take the Matriculation Ticket, and Dean's Certificate entitling him to the tickets of each Professor. Matriculation fee, $3; Dean's Certificate (entitling the holder to the Tickets of each Professor), $50; Graduation fee, $18. Students who have attended two full courses in other regular Medical Institutions, will be admitted upon payment of the Matriculation fee, and a fee of $10. Graduates of this and other regular Medical Schools are invited to attend the lectures free of charge.

Beneficiaries.—In consideration of the liberal donations made to the Medical College by the citizens of Burlington, the Faculty of Medicine have established a Beneficiary. A limited number of students will be admitted to all the lectures and enjoy all the privileges upon the payment of from $15 to $25, according to the number of applicants. The sons of Physicians preferred. Those wishing to avail themselves of the privileges of this benefit are requested to confer with the Dean as early as possible.

WASHINGTON (DISTRICT OF COLUMBIA).*

NATIONAL MEDICAL COLLEGE, WASHINGTON.

T. Miller, M.D., Emerit. Prof. Anat. and Phys. and Con. S.
James J. Waring, M.D., Prof. of Obst. and Dis. of Women.
John G. F. Holston, M.D., Principles and Practice of Surg.
John C. Riley, M.D., Prof. of Mat. Med., Ther., and Hygiene.
Nathan Smith Lincoln, M.D., Anatomy and Physiology.
Robert King Stone, M.D., Clinical Surgery.
A. T. P. Garnet, Clinical Medicine.
George M. Dove, M.D., Practice of Medicine.
George B. Schaffer, M.D., Chemistry.
Wm. E. Waters, M.D., Demonstrator of Anatomy.

Clinical Instruction.—The Faculty have adopted regular daily clinics at the bedside of patients. Besides a large number of rooms for private patients, the infirmary contains the wards into which are received such patients as are placed under the care of the clinical professors of medicine and surgery, such as the transient paupers, occupying the forty beds supported by an appropriation from Congress, the marine patients received through the custom-houses of Alexandria and Georgetown, and the poorer class of citizen patients who pay a small sum for their support. All medical students in the city have the privilege of attending gratuitously the clinical lectures.

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* Circular not received.

Graduation.—The requisites for graduating are, that the candidate shall have attended the lectures of each professor two full courses, or one full course in this school, and one full course in some other respectable institution. He must have a fair moral character, and he shall have dissected during at least one session. He shall have entered his name with the Dean of the Faculty as a candidate for graduation, and delivered to him an inaugural dissertation upon some medical subject, thirty days before the close of the session, and passed a satisfactory examination. All persons who have attended two full courses of lectures in this school are entitled to attend succeeding courses free of expense. The degrees are conferred by the authority of the Columbian College, incorporated by an Act of the Congress of the United States of America.

Fees.—The entire expense for a full course of lectures by all the professors, $90; single tickets, $15; Practical Anatomy, by the demonstrator, $10; Matriculating Fee, payable only once, $5; Graduating expenses, $25. No charge made for clinical lectures.

MEDICAL SOCIETIES OF NEW YORK.

New York Academy of Medicine.—Dr. Jas. Anderson, President. Dr. J. H. Hinton, Assistant Secretary.

This Society meets on the first and third Wednesday of each month, in the Chapel of the University Buildings, Washington Square.

New York Pathological Society.—Dr. A. C. Post, President. Dr. Geo. F. Shrady, Secretary.

Meetings of this Society are held at the College of Physicians and Surgeons, on the 2d and 4th Wednesdays of each month, at 8 p.m.

Section of Surgery, Academy of Medicine.—Dr. J. R. Wood, President. Dr. J. H. Hinton, Secretary.

The Section meets at the house of Dr. Jas. R. Wood, 2 Irving Place, at 8 p.m., on the 1st and 3d Fridays of the month.

Obstetric Section, Academy of Medicine.—Dr. Alfred Underhill, President. Dr. M. G. Porter, Secretary.

Meets at the house of the President, on the 1st and 3d Mondays of the month, at 8 p.m.

Medical and Surgical Society.—Dr. Alonzo Clark, President. Dr. W. H. Draper, Secretary.

This Society meets at the houses of the different members, and is not of a public character. The meetings are held on the 1st and 3d Saturday evenings, at 8 p.m.

Medico-Chirurgical College.—Dr. J. H. Douglas, Secretary. A President is selected at each meeting. The sessions are held twice a month, at the houses of the members. Attendance is always limited to invitations.

New York County Medical Society.—Dr. Henry D. Bulkley, President. Dr. H. S. Downs, Secretary.

Meetings are held at the College of Physicians and Surgeons.

HOSPITALS OF NEW YORK.

NEW YORK HOSPITAL.

Clinical Instruction daily at half-past one P.M.

Surgical Clinic, *Monday, Tuesday, Thursday, and Friday.*

Medical Clinic, *Wednesday and Saturday.*

Physicians.—Joseph M. Smith, M.D.; Henry D. Bulkley, M.D.; John H. Griscom, M.D.; Thomas F. Cock, M.D.

Surgeons.—Gurdon Buck, M.D.; John Watson, M.D.; Thaddeus M. Halsted, M.D.; T. M. Markoe, M.D.; Willard Parker, M.D.; G. A. Peters, M.D.

BELLEVUE HOSPITAL.

Clinical Instruction daily at half-past one P.M.

Physicians.—A. Clark, M.D.; B. W. McCready, M.D.; I. E. Taylor, M.D.; G. T. Elliot, M.D.; B. F. Barker, M.D.; A. L. Loomis, M.D.; J. W. Green, M.D.; T. G. Thomas, M.D.

Surgeons.—J. R. Wood, M.D.; L. A. Sayre, M.D.; J. J. Crane, M.D.; S. Smith, M.D.; W. Parker, M.D.; A. B. Mott, M.D.; C. T. Meier, M.D.; J. W. S. Gouley, M.D.; W. H. Church, M.D.

NEW YORK EYE INFIRMARY.

Clinical Instruction at one P.M.

Clinical Days:—*Monday, Tuesday, Wednesday, Friday, and Saturday.*

Surgeons.—J. H. Hinton, M.D.; F. J. Bumstead, M.D.; H. D. Noyes, M.D.

NEW YORK OPHTHALMIC HOSPITAL.

Clinical Instruction at one P.M.

Clinical Days:—*Tuesdays and Thursdays.*

Surgeons.—Dr. M. Stephenson; Dr. J. P. Garrish; Dr. M. P. Stephenson.

Medical News.

New York Medical College.—The preliminary course in this school began on Monday the 18th instant, with a lecture *on Amputations*, by Professor Carnochan. The audience was large, and contained several military surgeons attracted by the relation of the subject to their future duties on the field. The Professor reviewed the opinions of surgeons, ancient and modern, in civil and military practice, and pointed out the present state of surgical science. He then took up the immediate subject of his lecture, and after an illustration of the various operations and the circumstances under which they are to be performed, the preparation required, &c., he closed by demonstrating on the subject the different methods of procedure.

The faculty is now complete, and contains the following new names: E. Noeggerath, M.D., Professor of Clinical Midwifery; J. V. C. Smith, M.D., Professor of Anatomy; Wm. F. Holcomb, M.D., Professor of Ophthalmic and Aural Surgery; Samuel R. Percy, M.D., Professor of Materia Medica; C. C. Cox, M.D., Professor of Theory and Practice.

Bellevue Hospital Medical College.—The preliminary term in this new Institution opened on the 18th instant, with a lecture by Professor James R. Wood. The lecture-room was well filled on the occasion, the audience embracing students, practitioners of medicine, and a few not of the medical profession. Professor Wood prefaced his lecture with a brief account of the rise and progress of Bellevue Hospital, and the reasons for the establishment of a medical college in connexion with the Institution. He then entered on the consideration of the subject of his course during the preliminary term, viz. the surgical affections of the genito-urinary apparatus, and concluded with the performance of lithotomy on the cadaver. The preliminary term is now in progress, three didactic lectures being given daily, with an abundance of clinical teaching. A fair number of students are in attendance, and there is reason to expect a good attendance during the regular term, notwithstanding the present condition of the country.

The Faculty of the Bellevue Hospital Medical College have erected a commodious prominent building, fronting on East river, within the hospital grounds. They have introduced one innovation, to which we are sure students will not object. The benches are made comfortable with hair cushions. The building altogether is admirably adapted to the professors of medical teaching. The dissecting-rooms particularly are better lighted, more airy and comfortable than any we have ever seen.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.

Session of 1861–62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture I.

Why Physical Exploration is so called.—Enumeration of the several methods of Physical Exploration.—Points to be Impressed in entering upon the Study.—Analysis of Sounds with reference to Intensity, Pitch, Quality, etc.—Percussion.—The Normal Vesicular Resonance.—Differences in different healthy persons as regards this Resonance.—Disparity, as regards Resonance, between the two sides of the Chest in Health.—Value of the Normal Vesicular Resonance in Diagnosis.—Enumeration and Description of the Morbid Signs obtained by Percussion.—Exaggerated Vesicular and Tympanitic Resonance, Illustrated and Compared.—The Relation of the Pitch of Sound to the Vesicular Quality in the Different Morbid Signs.

Gentlemen:—The occasion of my first lecture in the first session of this college, and of my first lecture in this hospital and this city, suggests reflections which I must forego, and proceed at once to the consideration of the subjects to which the few didactic lectures assigned to me during the preliminary term, will be devoted. The subjects are, certain methods of examination denominated physical, of which auscultation and percussion are the most important. Why are they called physical methods of examination? They are with propriety so distinguished because, in the first place, the object is to ascertain physical changes produced by disease. Limiting attention to the respiratory system (and to this application of physical exploration my present course will be mainly restricted), the morbid anatomy of the organs of this system embraces various and striking physical changes. Thus, we have the normal spongy structure of the lungs converted, to a greater or less extent, into a solid substance by the exudations which take place in pneumonia, in tuberculosis, and in carcinoma; and, on the other hand, we have an abnormal accumulation of air, or a rarefaction of these organs, in the disease called emphysema. Between the free surfaces of the serous membrane investing the lungs and lining the thoracic walls, liquid accumulates in pleurisy, empyema, and hydrothorax, occupying more or less of the space which the lung occupies in health, compressing it and solidifying it by condensation. The air tubes, instead of being pervious to the free passage of air in inspiration and expiration, may be obstructed by the morbid products within the tubes, or by pressure from without. Certain affections lead to the formation of cavities in the pulmonary substance. These are some of the physical changes due to disease, and the object of physical exploration is to determine the existence, or otherwise, of such changes.

In the second place, the phenomena, by means of which these physical changes are ascertained, are, for the most part, physical phenomena; that is, they belong to physical, as distinguished from physiological, science. They pertain chiefly to the science of acoustics. Here, however, let me remark, that in order to understand these phenomena, sufficiently for the practical application of physical methods of examination, a profound acquaintance with acoustics is not required. The laws of sound to be considered, are those with which every one is familiar. The phenomena which represent the physical changes incident to disease, are called physical signs. For the sake of convenience the adjective physical is often dropped, and the term *signs* alone used to indicate these phenomena as distinguished from *symptoms*. This is not strictly correct, inasmuch as certain symptoms are not less physical signs, than the phenomena belonging to the methods of examination which we are to consider; the use of the terms, signs and symptoms, as denoting phenomena, on the one hand physical, and, on the other hand, vital or physiological, is open to criticism, but it is conventionally adopted in order to distinguish the facts obtained by the several methods of physical exploration from other symptomatic phenomena.

Finally, the methods of examination themselves are, to a certain extent physical or mechanical. In the practice of percussion, instruments for striking upon the chest are often employed. In auscultation, we often resort to instruments called stethoscopes. So, also, in measuring the size and movements of the chest, various mechanical contrivances are in use.

As I have said, of the several methods of physical exploration, auscultation and percussion are the most important. The other methods, however, possess not a little importance. Physical exploration embraces six different methods. By percussion we mean striking the chest, the signs consisting of the sounds produced in this way. Auscultation means listening to the chest, either by the direct application of the ear or by the intervention of a conducting instrument called a stethoscope, in order to observe the sounds produced by breathing, speaking, and coughing, these sounds constituting the signs obtained by this method. The other methods are as follows:—Inspection, which means simply an examination by the eye to determine signs relating to the size, form, and movements of the chest. Palpation, or the application of the hand to obtain signs relating to form and to certain sensations perceived by the sense of touch; mensuration, in other words, measurement of the chest by appropriate instruments, and succussion, or shaking the body, which, under certain circumstances, gives rise to abnormal sounds. In my present course I shall consider all these methods as applied to the diagnosis of diseases affecting the respiratory system.

I do not deem it necessary, gentlemen, to dwell, even for a moment, on the importance of physical exploration in the practice of medicine. Time was, and within my own recollection, when the employment of auscultation and percussion was regarded by very many with distrust, and treated with ridicule. That time is past. We are not now called upon to defend or advocate the value of the grand discoveries of Avenbrugger and Laennec. No intelligent practitioner of medicine, at the present day, denies the vast importance of physical signs in the discrimination of diseases; and no one competent to judge, will refuse to acknowledge the great influence of auscultation and percussion on the progress of medical knowledge, by the impetus which it has given to other researches. It is undoubtedly true, that physical exploration is too much neglected by a large number of practitioners. I will not now stop to inquire into the explanation of this fact. As regards yourselves, I have only to say that I am satisfied to leave you to form your own estimate of this portion of practical medicine, from the opportunities which will be offered in this hospital for testing its importance at the bedside and in the dead-house.

Before we proceed to consider the several methods of physical examination just enumerated, I wish to present, briefly, a few points which it is desirable should be impressed upon the mind of the student, and to which I shall frequently refer in the course of my lectures. And the first point is this: The study of the subject is not invested with difficulties which need prevent any from becoming acquainted with it sufficiently for the more important of its practical applications. Many, I have been led to think, are repelled from the study by an erroneous impression with regard to this point. Any medical student, with ordinary capacities, who is willing to devote to the study a fair amount of time and attention, and who has opportunities for bedside illustration, may master it so far as to secure its advantages in most cases of disease. It does not require, as some seem to suppose, any peculiar endowments of audition. We shall see that, as regards the distinctive characters of physical signs, intensity of sound is the least important. Unusual acuteness of hearing is therefore not requisite. A musical ear, as it is called, is of some advantage, but it is by no means indispensable; I have known persons wanting in what is known as a musical ear, who have become accomplished auscultators. Medical students, as well as other young men, often waste not a little time in becoming very indifferent performers on some musical instrument. A tithe of the time thus unprofitably bestowed, would suffice to become proficients in the practice of auscultation and percussion.

Another point is, physical signs represent certain physical, but not definite pathological, conditions. Thus, there are certain auscultatory signs which denote solidification of lung. Now, solidification of lung is incident to different pathological processes, viz. inflammation, tuberculization, condensation from pressure and collapse, etc. The signs only tell us that solidification exists. We determine the particular pathological condition which involves this physical change in individual cases of disease, by taking into account other facts than the signs—facts relating to the symptoms and the laws of disease. Certain signs show conclusively, the presence of more or less liquid in the pleural sac; but they do not indicate the character of the liquid, which may be pure serum, inflammatory effusion, or pus. To discriminate further, the signs denoting liquid, are to be considered in connexion with other signs, and with other facts than those obtained by physical exploration. The same holds true in other instances. We shall see that very few signs are in themselves pathognomonic. They declare demonstratively, that certain physical conditions exist; and, having ascertained these, it becomes a matter of further investigation, to determine what are the pathological conditions.

Another point, and one of great importance, is, our knowledge of the significance of signs rests altogether on clinical observations, including, in this term, examinations after death. Abundant experience shows, that certain signs observed during life, are constantly associated with certain changes found after death. This is the basis on which rests all our practical knowledge of physical exploration. If we attempt to reason from the laws of physics, that such or such signs ought to be produced by such or such changes, we are liable to be led into error. We must be careful that our clinical observations are not vitiated by speculative or theoretical reasoning. Owing to the numerous and peculiar physical elements involved in the production of signs, they are not always intelligible. They are sometimes precisely the reverse of what we might have been led to expect by reasoning *à priori* from physical laws. It is certainly desirable to ascertain, as far as we can, the mechanism of the signs, but it is not necessary to do this in order to appreciate their significance. We shall have occasion to see that theoretical notions have led some observers to glaring errors of observation.

Another point, often not sufficiently appreciated in commencing this study, is, the signs which represent conditions of health must be thoroughly known, as a point of departure for acquiring knowledge of morbid signs. The phenomena which constitute the signs of disease, are either modifications of, or are superadded to, phenomena found in the healthy chest. The latter are to be studied and fully known, before the former can be understood. If the student begins to observe the phenomena of disease, without having given sufficient attention to the phenomena of health, he fails to make satisfactory progress. As we shall see, the healthy signs have not been analysed and studied with sufficient minuteness and care, even by those who have made physical exploration a subject of special investigation.

Lastly, it is essential to a thorough knowledge of the subject to know clearly and completely the distinctive characters which belong to each and all of the physical signs. It is not enough to have a general idea of the signs. What are all the characters which distinguish the signs respectively? This question is the guide to knowledge of the subject. In an acquaintance with nice distinctions, easily appreciated when known, will be found to lie the secret of the art of physical exploration. In the better knowledge of these distinctions consist, in a great measure, the improvements in this art since the time of Laennec. In the course of my lectures I shall present the fruits of my own studies as regards the distinctive characters of different signs.

The distinctions belonging to the signs furnished by auscultation and percussion relate to sounds. It will prepare us to understand these distinctions, to consider the several points of view under which the percussion and auscultatory sounds are to be studied. How do different sounds differ from each other? I produce a sound by striking an object within my reach, and I produce another sound by striking a different object; now, in what respects are these two sounds to be compared? First, sounds may differ as regards intensity, or, in other words, simply in relative loudness. I strike the same object two blows differing in force, and I produce two sounds which differ in intensity. This is one of the points of view under which the sounds constituting signs are to be studied, but we shall see that distinctions based on intensity of sound are of less importance than others.

The pitch of sounds is another point of view. This is of very great importance as the source of the distinctive characters of signs. My own researches have had reference especially to the variations in pitch of the sounds furnished by auscultation and percussion, but I feel sure that I do not exaggerate the value of the distinctions based on characters derived from this source. We shall see that some of the most striking and readily appreciable characters distinguishing certain signs relate to pitch. What do we mean by the pitch of sounds? Simply the variations expressed by the terms high and low, acute and grave, treble and base; in other words, the relative altitude in the diatonic scale. I produce two sounds by striking with my percussor different objects within my reach; these sounds differ in pitch, the one being high and the other low. I shall not stop to consider whether the sounds thus produced by striking the table before me and the boards inclosing the area of this amphitheatre, be correctly called sounds; for our practical purposes we may so consider them, as we may also the sounds produced by striking the chest, and the sounds heard on auscultation.

Next, sounds differ as regards quality. Now, gentlemen, I beg you to distinguish clearly between the pitch and quality of sounds. This is not always done readily by those who have given no attention previously to the subject. Characters pertaining to pitch and quality are apt to be confounded. Let me endeavor to make the distinction clear. Suppose we were to hear coming from an adjoining room the sound of a violin. Although we do not see the performer or the instrument, we recognise the sound at once as coming from a violin. How do we do this? We are familiar with the peculiarity of the sound of that instrument; so we would at once recognise the sound from any instrument with which we are familiar. If the sound came from an instrument with which we were not familiar, we should not at once recognise it. Now in what consists the peculiarity which enables us to refer different musical sounds to the instruments which produce them? Plainly, it is not the pitch of the sounds, for we recognise the instruments equally well whether we hear high or low notes, and we can readily distinguish two instruments played together when the notes are in perfect unison. Nor is it the intensity of the sounds, for it matters not whether they are weak or strong, in either case we know their source. We distinguish them by means of the quality of sound. The violin yields a sound having a peculiar quality; so with the flute, or any other musical instrument. We shall see that most important distinctions belonging to signs are derived from the quality of sounds furnished by auscultation and percussion.

Another point of view under which sounds are to be studied, relates to the different distances from, or proximity to the ear. In auscultation we can appreciate differences in this regard, and they are of some practical importance. Still another point relates to the duration of sound. This, however, has comparatively little importance. The great distinctions are based on intensity, pitch, and quality; these terms I shall often use in teaching auscultation and percussion.

One word more by way of introduction. The physical signs which clinical observation has established, are to be first learned mentally, that is, the mind must first of all understand the distinctions which belong to them respectively. Then they are to be confirmed by clinical observation. The beginner sometimes imagines, or is told, that the way to study physical exploration is to go at once into the wards of a hospital without any previous knowledge of the subject and learn for himself at the bedside. This is to place oneself in the position in which the illustrious Laennec was placed when he commenced his investigations. The student, who, it is probably safe to assume, is generally without the genius of Laennec, makes very little progress in this way. I repeat, the first thing is to understand the distinctive characters of the signs, and then accomplish the verification. In accomplishing the latter a great deal of time and difficulty is spared to the student by having the aid of a competent instructor at the bedside. This is not indispensable, but the student will make surer and vastly more rapid progress than if he is obliged to trust to his own judgment in verifying the characters distinctive of the different signs.

Of the several methods of physical exploration, I shall first consider *Percussion.*

What are the important facts pertaining to the signs obtained by striking on the healthy chest? This is the question to be first considered. I shall introduce a person who is presumed to be free from any pulmonary affection. I strike upon the denuded chest, using for this purpose instruments called a percussor and pleximeter, of which I will speak by and by. I select as a favorable point for striking, the upper part of the left side in what is called the infra-clavicular region. You hear the sound which I produce. Now let us analyse this sound with reference to intensity, pitch, and quality.

The sound has a certain intensity. This, however, I can increase or diminish by simply increasing or diminishing the force of the blow. But with a given amount of force the intensity depends on a variety of circumstances, such as the volume of lung, the thickness of the soft parts covering the thoracic walls, the elasticity of the costal cartilages, etc. The sound is low pitched. You would say of such a sound, it is not high but low, or it is grave not acute. It has a peculiar quality. You cannot produce by any mechanical contrivance a sound possessing precisely such a quality. The quality is as peculiar to this sound as the quality of a note from a violin is peculiar to the sound coming from that instrument, or as the note from any instrument of music is characteristic of that instrument. What gives to this percussion sound this peculiar quality? The peculiar structure of the lungs, by which air is contained in an immense number of minute air cells or vesicles. You see I produce a sound having the same quality and greater intensity, by striking on several specimens of lung removed from the chest, which are on the table before me. It is desirable to distinguish this quality by a name, and, in view of its dependence on the vesicular structure of the lungs, we will call it the vesicular quality. I beg you to pay attention to the quality of this sound, and accustom the ear to its recognition. It should become as familiar to you as the sound of the violin, flute, or any of the musical instruments in common use.

What shall we call the sound, as a whole, produced by striking upon the healthy chest? We may call it the *normal vesicular resonance.* It is called the normal pulmonary resonance or simply the normal resonance. I prefer to use the word vesicular, as serving to keep us in mind of the peculiar quality of which I have just spoken.

Is this normal vesicular resonance in all respects equal in all healthy persons? It is not. To illustrate this statement I now introduce several persons not affected with any pulmonary disease. I strike successively on the chest of each of these persons, in the same situation and with the same amount of force. You perceive that the resonance is not alike in all. In some it is more intense than in others; the vesicular quality is more marked in some than in others, and as regards pitch a regular gradation is apparent. Differences as regards the volume of lung, the thickness of the walls of the chest, the elasticity of the ribs, etc., produce these variations, which are perfectly compatible with health. Hence, there is no ideal standard representing the normal vesicular resonance. Does this fact diminish the value of percussion in disease? It does not. We judge that the resonance is normal in any individual case, not by reference to any fixed criterion applicable alike to all persons, but in each case separately. In other words, each person furnishes his own standard of normal resonance. To determine what this standard is, we compare the two sides of the chest. In general, on one side we find the resonance proper to the person in health. And with reference to this comparison, the laws of the diseases affecting the pulmonary organs are such that, in the great majority of cases in which these diseases involve important modifications of resonance, they are either confined to one side, or are greater on one side than on the other. The laws of these diseases, in this respect, seem to have been ordained with a view to diagnosis.

In what has just been stated it is implied that in health the resonance in the same person on the two sides of the chest is equal; in other words, that the two sides are in this respect symmetrical. Is this true, assuming that there exists no deformity from any cause? It is not strictly true. If we percuss over the middle third of the chest, in front, as I do now in the healthy persons before us, we find an evident disparity due to the presence of a large portion of the heart on the left side of the median line. Percussion in the precordial region, as it is called, is of great importance in examinations with reference to the size of the heart. But with these we have not at present to do. At the summit of the chest, in front, a normal disparity exists, of which in some cases it is very important to take cognizance. We shall refer to this often in examining patients with reference to the existence, or otherwise, of a small amount of tuberculous deposit. What is the law with regard to the normal disparity in this situation? It is this: the resonance at the left, is generally more intense than at the right summit; the vesicular quality is more marked, and the pitch is lower. Conversely, the resonance at the right, is less intense than at the left summit; the vesicular quality is less marked, and the pitch is higher. This law I give as based on numerous comparisons in healthy persons free from any deformity. You will find it illustrated as I proceed to percuss the two sides of the chest at the summit, as equally as possible in all respects, in the persons now before you. In all these persons the disparity is apparent; but, as you see, it is more apparent in some than in others.

Other points relating to the normal vesicular resonance I will for the present defer. You will find this subject treated of with much detail in my work on the respiratory system. I would recommend, as a most useful and necessary exercise, the practice of percussion on the healthy chest, with a view to becoming familiar with the characters belonging to the normal resonance, and with the normal disparity between the two sides. By this practice you will acquire a facility and tact which will insure skill in the employment of percussion to develop signs of disease. More than this, practical familiarity with the phenomena of the healthy chest, without any acquaintance with the signs of disease, is of great value in diagnosis. Had our knowledge of percussion advanced no further than the signs of health, the acquisition would have been of immense importance to practical medicine. The healthy signs show that the pulmonary organs are free from any of the diseases which occasion abnormal sounds on percussion. Finding the signs of health, then, we are able at once to exclude all these diseases. And here let me remark that this fact illustrates the double application of all the methods of physical exploration. Each has a positive and negative application. Its application is positive in diagnosis, when it reveals morbid signs; its application is negative, when, by revealing the phenomena of health, it shows the existence of the normal conditions of the organs explored, and thus enables us to exclude those affections which involve physical changes in these organs.

Let us now direct attention to the morbid signs obtained by percussion. What are these morbid signs? They are certain deviations from the normal vesicular resonance. They differ from the latter in characters pertaining especially to the intensity, pitch, and quality of sound: they are few in number. With some varieties, not of great importance, they may be reduced to five. You have only to become acquainted with these five signs, and know fully their significance, to have mastered the subject of percussion. I will enumerate these five signs, with a description of each based on an analysis of its elementary characters, and then I shall proceed to illustrate them, and consider them more fully with reference to the physical changes which they represent.

First. The resonance may be greater in intensity than in health, the vesicular quality not being lost. This sign we may call *exaggerated vesicular resonance.* This sign is of practical importance chiefly in a single form of disease, viz. pulmonary or vesicular emphysema. Observe in the description of this sign the statement that the vesicular quality is not lost: this, as we shall presently see, is an important distinction.

Second. The consonance may be diminished in intensity. This is called *dulness.* Any degree of diminution of the normal vesicular resonance constitutes dulness, which may be slight, considerable, or great, and these terms suffice to denote the amount of dulness. In general, whenever the ratio of solids over air within the chest is increased, provided sufficient air remains to yield any sonorousness, we have dulness. Various diseases involve the physical change just stated, viz. increase of the ratio of solids. This occurs when solid exudation matter is deposited in the lungs, as in pneumonia, tuberculosis, and carcinoma; when liquid is effused into the pleural sac, or in the air vesicles; when morbid products accumulate in considerable quantity in the bronchial tubes; when a portion of the lungs is greatly congested. It occurs, also, when the lung is condensed by pressure or by collapse. Dulness, thus, is an important sign in a great number of diseases.

Third. The resonance may be entirely abolished. Whenever there is complete absence of resonance there is said to be *flatness.* In dulness, the resonance is more or less diminished; but in flatness there is no resonance whatever. The chest yields a sound, or more properly noise, when struck, as if the blow were directed upon the thigh or any part composed of solid bone or flesh. This occurs especially when the chest is filled with liquid, and below the level of the liquid when it occupies only a portion of the thoracic space. It may also occur when a considerable portion of lung is completely solidified either by morbid deposit or condensation; and it occurs when a solid tumor is contained within the chest and displaces the lung to a greater or less extent. It is obviously an important sign.

Fourth. I come now to a highly important sign, distinguished by a change in quality, viz. *tympanitic resonance.* There has been not a little confusion in the use of this term. Restricting it as I think it should be restricted, I am sure that I can easily make it clearly intelligible. A tympanitic resonance is a resonance wholly devoid of the vesicular quality. Any resonance which has no vesicular quality is tympanitic. The type of the sound and the source of the name is the abdomen, when the condition known as tympanites exists. But intensity has nothing to do with the distinctive characters of the sound; no matter how feeble the sound, if it be devoid of vesicular quality, it is tympanitic. On the other hand, tympanitic resonance may be intense, exceeding the intensity of the normal resonance. It does not, however, fall under the head of exaggerated *vesicular* resonance in such a case, because in the latter the vesicular quality is not lost. A tympanitic resonance is generally marked, *i. e.* intense, in cases of pneumo-thorax. In this affection we have air in a large free space within the pleural sac. It is because the air is in a free space, and not in the air vesicles, that we have the tympanitic, and not the vesicular quality of sound. But we also have tympanitic resonance in certain cases over solidified lung if the bronchial tubes contain air. We also have it over cavities of considerable size when these are empty, that is, containing only air.

Fifth. I have found it useful to reckon as a distinct sign what I have called a *vesiculo-tympanitic resonance.* The introduction of this new term does not complicate, but, on the contrary, as the term is descriptive, it simplifies the subject. I mean by a a vesiculo-tympanitic resonance, a resonance partially, not entirely, tympanitic. It is a combination of the tympanitic and vesicular qualities. I will defer, for the present, speaking of the physical conditions under which this sign is presented.

The little time which remains of the hour appropriated to this lecture, I will occupy in illustrating two of the signs just enumerated and briefly described. I shall select the first and fourth, or the exaggerated vesicular and the tympanitic resonance. I now introduce three patients affected with pulmonary emphysema; I shall not call your attention to the signs determined by other methods than percussion in these cases. Certain abnormal appearances of the chest may attract your attention. These we shall consider hereafter. I strike the chest in these three cases, and you see I produce a remarkably clear, intense sound: this is obvious when I compare the resonance in these cases with that in the healthy persons whom we have examined. Now you will observe this resonance, although intense, has the vesicular quality; this is evident when I compare the sound produced by striking the chest with the sound produced by striking over the abdomen in the same persons.

I now introduce a patient affected with pneumo-hydrothorax. A large portion of the pleural sac on the affected side is filled with air; the evidence of this, afforded by other signs which we shall hereafter consider, is complete. I strike upon the chest, and you perceive that I produce a clear, intense sound; but, mark, this sound has no vesicular quality. You will appreciate this fact more clearly when I compare the resonance in this case with that in one of the cases of emphysema before you; in both these cases the resonance is clear and intense, but in one the vesicular quality is not lost, while in the other it is entirely wanting.

You will observe that in the tympanitic resonance in thi case of pneumo-thorax, the pitch of the sound is higher than in the normal vesicular resonance in any of the cases which we have examined. This is invariably the case. I may here state another fact with regard to pitch: Whenever the resonance is morbidly diminished, *i. e.* whenever dulness exists the pitch of the sound is raised. Still another fact having reference to the pitch of the vesiculo-tympanitic resonance; i is always higher in pitch than the normal vesicular resonance. In other words, this general law holds good without exceptions: whenever the vesicular quality in percussion sounds is morbidly diminished or lost, the pitch of the sound becomes higher than that of the resonance in health.

In my next lecture, gentlemen, I shall proceed to illustrate further the morbid signs obtained by percussion, considering them as they are presented in different forms of disease, with reference to their distinctive characters, significance, and diagnostic value. In the mean time, I beg you to bestow some reflection on the facts which I have presented in this lecture.

Original Communications.

CASE OF GUN-SHOT WOUND OF THE CHEST.

By A. B. SHIPMAN, M.D.,

SURGEON TO THE 12TH REGT. N. Y. VOLUNTEERS.

A **German** of fine constitution, age twenty-two, from some love affair in which he felt himself aggrieved, loaded a revolver with four balls in each barrel; one of which he discharged into the left side of his chest between the sixth and seventh ribs, about an inch below the nipple. He fell down, and I was sent for to see him. This was at Syracuse, N. Y., Feb. 8, 1860. I found a large opening below the left nipple with a profuse hemorrhage; air escaped at every inspiration and expiration, showing a wound of the lung. He was cold and nearly pulseless. I dressed the wound with pledgets of lint, applied a bandage around the chest, and gave a full anodyne. On examining the wound I discovered something projecting from it, and on pulling it out I found it was the cotton wadding of his vest with one of the balls. It was evident that three more were yet in the chest and beyond reach. On visiting him the next day, Feb. 9th, I found that there had been profuse hemorrhage from the wound, probably from the intercostal artery. Feb. 11. Had a chill, followed by reaction and severe pain in left side of chest, with cough and no expectoration. Gave anodyne to allay pain and restlessness, with small doses of tart-ant. 12th. Removed the lint from wound and applied an emollient poultice. Fever on the increase, cannot lie down in bed, but sits up in chair, with head leaning forward. Pulse 130, with increasing dyspnœa. Extreme tenderness over left side of chest, anodynes and ant. continued. No air passed out of wound. 13th. Wound begins to suppurate; fever continues unabated; sits in same position, with forehead resting on the back of a chair. Any attempt to take a horizontal position was attended with a sense of suffocation; pulse 135 per minute, weak. 14th. Suppuration on the increase; yet it is thin and sanious; cannot rest without large doses of morphine; poultices continued; takes no nutriment but tea, with sugar and milk. It is useless to continue the daily report of this case, as there was a steady aggravation of all the symptoms for several weeks, and an increasing amount of suppuration, until it would average sixteen ounces of pus per day, becoming very fetid, yet to all appearance of good quality and more consistent. About the middle of March, some six or eight weeks after the injury, air began to pass through the wound, expelling the pus when an inspiration was made. About this time the whole left side of chest was dull on percussion, and no respiratory murmur could be detected, except beneath the clavicle and root of bronchi. This dulness had steadily increased from the first, as had the decreasing respiratory murmur. No mucous rale had ever been heard over his chest.

From the middle of March to the middle of April there was a steady aggravation of all the symptoms, the pus becoming more profuse and fetid; the pulse more frequent and weak. In the afternoon and evening would be found to range from 140 to 150 per min. He was obliged to sit in the same position day and night; the least exertion or change of position producing a sense of suffocation. His appetite was poor, and he lived on tea and lemonade.

A month later there was scarcely any change except for the worse. Nothing appeared to produce relief but the morphine, and so anxious was he to get some rest that he would take the four or five powders I left to answer for as many days in the course of the night, and next morning would be feeling quite comfortable. About the first of June he began to have severe pain and soreness in a situation about four inches below the original wound. This, after a few days, began to swell and become inflamed on the surface, until a fluctuation was perceived, and on opening it a pint of pus was discharged, and one of the balls (an inch square piece of twilled linen) and a piece of the external surface of a rib an inch and ⅛th in length, and ¼th of an inch wide, with the mark of the bullet near its centre.

Some time about the middle of July he began to have morning chills with evening exacerbations of fever and profuse night-sweats, swelled feet and legs, aphthous mouth and diarrhœa, and extreme emaciation. I now informed him, by the earnest wishes of his friends, that the hour of dissolution was not far off. He began to have a severe and harassing cough, which nothing would mitigate except anodynes. The discharge from the wound kept up, and was nearly as profuse as ever; while I could never find his pulse less than 145 per min., and more often 155. I now ordered him quinine, wine, porter, and as generous a diet as his stomach would tolerate—but the opiates were indispensable. He kept along with but little change until September, when a slight improvement took place in his appetite and strength, and he became able to walk a few steps about his room. At the same time the œdema of his feet and ankles began to diminish, and the discharge lessened in quantity. The air ceased to pass through the opening in his side, yet the pulse remained as frequent as ever, and his sweats unabated. He rested better nights, and required less anodyne. From this time a steady but slow improvement took place, and by the first of November he began to walk out of doors. The cough continued, and the pulse was never found below 120 per min. He still continued to improve, and as cold weather approached his strength improved more rapidly than in hot weather. He began to improve in flesh, and by the first of January, 1861, he was quite well, with the exception of debility and dyspnœa.

March 1, 1861.—This patient, on examination at this time, was found to have improved within the last three months to such a degree as to be able to walk four miles and back again without much fatigue. Auscultation revealed the left lung pervious in the upper portion, and the respiratory murmur was distinctly heard in more than one half the lung. His pulse was about 100 per min. Yet no unusual dyspnœa was present, and he had regained his strength and health, and was in reality well. A small discharge yet remained from a fistulous opening, three inches between the entrance of the balls, but it gave him no trouble, and the discharge was trifling.

Remarks.—The only point of interest in this case is the termination of a severe wound of the chest, with foreign bodies remaining there, and severe inflammation and suppuration of the left lung and closing of the air cells, and finally, resuming the functions in a partial degree of the left lung. At one time it seemed the patient must sink under hectic fever, and debility from local causes. Yet, after all, rallied and recovered with the foreign bodies yet remaining in the parts. No credit is claimed from treatment, unless it be from promptly meeting the debility and irritation by tonics and the free use of *anodynes*, which did more good than all others to restore him. In truth, I believe in all cases of injuries where it is attended with much pain and fever, that opiates gradually administered do more service to bring the case to a favorable termination than all other remedies. The patient's age, constitution, and all together, had a share in the favorable result.

Death of Mr. Jones, of Jersey, England.—This distinguished surgeon died Sept. 7, of typhus fever. He is well known for his numerous successful resections of the knee-joint.

Reports of Hospitals.

NEW YORK HOSPITAL,

FIRST SURGICAL DIVISION,

JAS. L. LITTLE, HOUSE SURGEON.

Case of Complete Dislocation of the Patella, outward.

Dislocations of the patella are of very rare occurrence, so much so that it is said that Liston, in the course of his practice, never saw a case. They are sometimes caused by muscular action, and, in other cases, result from direct violence.

The most common form is the dislocation outwards, of which the following case is an example. The patella may also be luxated inwards, upwards, or turned upon its axis; this last form is very rare, according to Hamilton only fifteen examples have been recorded, one of which occurred in the practice of Dr. John Watson, one of the attending surgeons of this Hospital. The dislocation upwards is generally accompanied with a rupture of the ligamentum patellæ, and requires the same treatment as a fractured patella.

Patrick Leonard, aged 40, was admitted July 11th, 1861. About half an hour previous to admission, while engaged in unloading a canal boat loaded with coal, his left knee was jammed between a bucket containing a ton of coal, and the boat, the bucket striking the inside of his knee. On admission, the left knee was found very much swollen, and the synovial cavity distended with fluid. The limb was firmly fixed in a straight position. The patella was absent from its normal position, and on examination was found on the outer side of the joint, resting over the external condyle. Patient complained of great pain in the part. About half an hour after admission, at the visit of Dr. Geo. A. Peters, the attending surgeon, the bone was reduced in the following manner. The patient being placed upon his back, while the thigh was flexed upon the pelvis, in order to relax the quadriceps extensor muscles, and the leg extended upon the thigh, the patella was seized, and after some little manipulation was slipped into its place. In consequence of an apparent tendency to a reluxation, a compress of lint was firmly secured over the outer side of the joint. The limb was then placed on a single inclined plane, and an evaporatory lotion applied to the part. Under this treatment the effusion within the joint rapidly subsided, leaving a large fluctuating swelling on the lower third of the inside of the thigh. About two weeks after the injury this swelling not diminishing, and as patient complained of considerable pain in the part, an explorative puncture was made, and a few drops of dark-colored blood made its escape, showing that the tumor was a collection of effused blood from the rupture of some vessel in the neighborhood of the joint. It was not deemed advisable at this time to make an opening to allow of its escape, and so the patient was ordered to keep the limb quiet, and the tinct. of iodine and pressure applied to the swelling. Under this treatment the tumor remained in apparently the same condition up to the beginning of the fourth week, when it began slowly to subside. At the present time, this swelling is about one half its original size, painless and hard to the feel, no signs of suppuration having appeared. Patient is able to walk upon the injured leg, experiencing no inconvenience except some stiffness caused by the above mentioned swelling.

* * *

Resignation of Prof. Keating.—We regret to learn that this gentleman, recently appointed to the Chair of Obstetrics in the Jefferson Medical College, Philadelphia, made vacant by the resignation of Prof. Meigs, has been compelled to resign his position owing to ill health. We learn that Prof. Meigs will supply the vacancy during the present session.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 11, 1861.

Dr. A. C. Post, President, in the Chair.

CIRCOID ANEURISM.

Dr. Krackowizer presented a specimen of circoid aneurism of the temporal and post-auricular arteries of the right side of a living subject. The tumor was divided into two parts: that over the temporal artery was smooth upon its surface, and resembled in size and shape the half of a full-sized orange; while the other portion of the mass, large in bulk and connected more particularly with the posterior auricular artery, was very irregular in form, being divided up into numerous secondary tumors which shot out in the form of processes curling upon themselves. The patient was forty years of age, and had always enjoyed good health, with the exception of two attacks of typhus fever, the first of which took place about seven years before, when Dr. Krackowizer had the opportunity of seeing him. The history then given was that the tumor had made its appearance from his earliest recollection, and that it had kept on steadily increasing until it had attained the size referred to, and indeed, as far as the recollection of Dr. Krackowizer served him, the growth had not been arrested since then, except perhaps that of the anterior tumor. The tumors were soft and elastic on pressure, and disappeared readily by pressure on the carotid of the affected side. The patient did not seem to suffer from any pain in consequence of the presence of the disease, could lie upon the tumor sleeping comfortably, and the hearing of the right ear was not interfered with except by the continual noise of the blood rushing through the aneurism. No ulceration had at any time taken place, neither had hemorrhage. No abnormal sound in the heart or lungs could be detected; the pulsation of the right carotid was stronger than the left. There was no difference in the pulsation of the two radial arteries.

Dr. Post remarked that the disease was one of rare occurrence, and referred to the case of a young lady in one of the neighboring counties in whom the branches of the temporal and auricular arteries were largely involved, forming a series of swellings which occupy nearly the whole of the corresponding side of the head. The disease had existed from early childhood. Both carotids were tied at suitable intervals; Dr. Kearney Rodgers performed the first operation, and Dr. Van Buren the second. No material impression, however, was made upon the tumors, the patient continuing to suffer, as before, with occasional headaches, otherwise she enjoyed very good health. Dr. Post also referred to a specimen of the disease, about the size of the end of his thumb, which he had seen in the person of a student of the University Medical College.

Dr. Krackowizer, in discussing the question of treatment, remarked that it was known that the disease had a tendency to progress not only towards the periphery of the vessel but also in a retrograde or centripetal manner. This latter fact he seemed to think was illustrated in the case presented, inasmuch as the pulsations of the right carotid artery were stronger, as far as his recollection served him, than they were seven years before, when he saw the patient for the first time. This suspicion being confirmed, a very strong argument was brought to bear against the practicability of an operation, as the coats of the main artery, being necessarily more or less attenuated, would render the application of a ligature dangerous.

Dr. Post stated that such was the nature of the disease, the swellings being in the continuity of the artery and not in side pouches as in ordinary aneurisms. In no event was there much if any hope of coagulating the blood by ligature. It was a question with him whether the injection of the perchloride of iron would not be serviceable in such cases.

Dr. Krackowizer stated that a case was reported as having been treated successfully by Nélaton by the use of acupuncture. He did not know of any case where the injection of perchloride effected a cure. He, however, had read of two cases which terminated spontaneously.

INTRA-CAPSULAR FRACTURE OF CERVIX.

Dr. Roosa next exhibited a specimen of simple intra-capsular fracture of the cervix femoris.—Wm. M——, æt. 51, N.Y. seaman. Admitted to the New York Hospital, service of Dr. Parker, Nov. 3, 1860. Two days prior to admission patient fell from a slide, a distance of about four feet, striking on his right hip. He was unable to rise, and on being lifted up, could bear no weight on the right side. The patient is of intemperate habits, and before any thorough examination was had was attacked with delirium tremens. He was removed from the surgical ward to the one appropriated to cases of delirium. Two weeks after he is tranferred to the surgical ward, and the following appearances noted, on right side: 1. Eversion of foot; 2. Inability to raise the limb; 3. Shortening 1¼ inch; 4. Crepitus (doubtful). The diagnosis was fracture of neck of thigh-bone, within the capsule, and it was verified in the subsequent state of patient, crepitus being detected. He could bear no apparatus. Two months after he was able to get about the ward with help of a cane. Symptoms of phthisis showed themselves, and on Sept. 9, he died of that disease; shortening at death 1¾ inches. The shortening two weeks after accident was 1¼ inch, ¼ inch more than Robert Smith thinks the maximum intra-capsular fracture on immediate injury. Neck of bone was absorbed, and there was consequent increase of shortening. The compensating exostosis was ample, a circumstance more common, perhaps, in extra-capsular fracture, than in any other.

RUPTURE OF THE APPENDIX VERMIFORMIS.

Dr. Sayre presented a specimen of *Sphacelation and Rupture of the Vermiform Appendix of Cæcum; Peritonitis, Death, and Autopsy.*—John Murphy, aged about 35, was seized with pain in the abdomen on the 29th of August. He was a healthy, robust man, and enjoyed excellent health up to that date. On the morning of the 29th he was as well as usual, ate a hearty breakfast, had a free evacuation of the bowels, and went to his place of business. The pain in the abdomen commenced during the forenoon, and increased to such an extent that he returned to his hotel, but did not take to his bed until evening. In the evening he sent for Dr. Sayre. Dr. S. found him complaining of considerable pain, which resembled that of colic, and also discovered a small tumor in the region of the iliocolic valve. He prescribed several grains of calomel, to be followed by the citrate of magnesia. There was no febrile movement on this evening.

On the 30th, Dr. S. found the patient still suffering from pain. No dejection had occurred, and the citrate of magnesia had been in part rejected by vomiting. Blue mass was prescribed, to be followed by repetition of the citrate of magnesia and enemas. At evening the pulse had become accelerated, the abdomen was tender on pressure, especially in the right iliac region, and there was some meteoric distension. On careful examination, Dr. S. was able to perceive a small tumor, very painful to the touch, in the right iliac region. The patient was bled from the arm; several leeches were applied over the iliac region, and Magendie's solution prescribed.

On the 31st, A.M., vomiting was a prominent symptom; the pain and abdominal tenderness continued. The urine was drawn with the catheter. No dejection had as yet occurred. On this morning croton-oil was given, but at once rejected, and enemas were given through a long flexible tube introduced into the rectum. After trying the croton-oil, Magendie's solution was given in free doses. At 6½ A.M. the patient was seen by Dr. Flint in consultation. The abdomen had then become considerably distended, and was everywhere tympanitic on percussion, except over the cæcum. The tenderness over the whole abdomen was considerable, but especially marked in the right iliac region. The respirations were purely costal. The pulse was extremely frequent, feeble, and irregular. Vomiting, or rather regurgitations, occurred frequently, the matters rejected being dark, and not emitting fæcal odor. Mental faculties not impaired. Death took place about 11 P.M.

Autopsy about 12 hours after death.—On opening the abdomen a considerable quantity of muddy, yellowish liquid escaped from the peritoneal sac, emitting a fæcal odor. Some gas escaped on opening the peritoneal sac. The intestines were much distended with gas; they presented, externally, arborescent redness; and the convolutions at various points were agglutinated to the abdominal walls and to each other by recently exuded lymph.

The appendix vermiformis of the cæcum was distended, and quite black. Near its junction with the cæcum was a rupture, through which gas and liquid matter from the intestines escaped when the parts were handled. The cavity of the appendix was filled with a solid mass which appeared to be hardened fæces. The inner surface of the cæcum, and of the ilium for several inches above the cæcum, presented a healthy appearance. The opening from the cæcum into the cavity of the appendix was free, and presented a healthy appearance.

The Society then adjourned.

Information Supplementary to the Students' Number.

SCHOOLS OF PHARMACY.

Allied to the profession of Medicine, and of equal importance, that of Pharmacy should be as carefully cultivated. The efforts of the colleges of Pharmacy in three leading cities of our Union have never been as successfully met as they deserved. Why have they not been more successful? These institutions are of necessity limited to large cities, but even there, they are *exotics.*

The members constitute but a very small proportion of those engaged in the business, while of those who are but a few years in the store, a still smaller number have availed themselves of the instruction offered. If it is proper that the student should spend years in attending lectures, clinical instruction, and reading medicine, simply that he may be prepared for the practical duties that come only by daily experience; it is also proper that the student in pharmacy should devote time to studies and lectures on subjects quite as important to him in his future vocation as a Pharmaceutist. Why they do not, is a mystery. The Medical profession have never taken sufficient interest in this matter. The physician is powerless for good results, if his prescriptions are not properly compounded. It then behoves them to see that they as far as possible throw their influence in behalf of the competent and educated Pharmaceutist. Were this the case, Pharmacy would now occupy a much higher position than it does.

The duty of the Pharmaceutist is to make or prepare from the crude materials all substances (to be used medicinally) that come within the limits of his business. There are but few that do, or are willing, to make their own preparations. The excuse with some is, that they have not the time, others say it don't pay, while others prefer to buy because they can get them *cheaper*. The honest physician should avoid the latter class.

The Pharmaceutist who applies himself to his legitimate calling is too often lost sight of by his medical brethren, as well as the public, who patronize another (perhaps far his inferior in the knowledge of his business), because he has a large assortment of merchandise, a more showy store, or the latest styles of elixirs. We trust a new era is soon to begin in our profession, and that Medicine and Pharmacy will go hand in hand. The Physician's duty is, to encourage the competent Pharmaceutist by all means that are at his command.

Pharmacy, as a science, has been taught in the United States since 1820, when lectures were first given in the Philadelphia College of Pharmacy, now the most flourishing school in this country. A few years later, in 1829, a similar institution was organized in this city; and the following winter, Dr. John Torrey occupied the chair of Chemistry, and Dr. Stephen Brown, the chair of Materia Medica and Pharmacy. We would call special attention to the notice of Lectures to be delivered during the coming season, in this college, which is now located in the University building.

In Baltimore, the Maryland College of Pharmacy announces its annual course of lectures to commence Oct. 15th. This Institution is of more recent date, but its members are active, and conduct an able Journal in connexion with their college. Chicago and Boston have similar organizations, but we have not heard what arrangements have been made for the coming season.

New York College of Pharmacy.

Jno. M. Maisch, Prof. of Phar. and Mat. Med.; Ferdinand F. Mayer, Prof. of Chem.

The Thirty-Second annual course of lectures in this institution will commence on Monday, October 21st, and terminate about the middle of March, 1862.

The college rooms are located in the University Building. To the pharmaceutist who aims at success and a respectable position, it is unnecessary to argue the importance of a well grounded knowledge of the scientific, as well as practical part of his profession. This knowledge is now placed within easy reach of almost every student, however limited his means and time.

The College of Pharmacy, chartered for the express purpose of "cultivating, improving, and making known a knowledge of Pharmacy; its collateral branches of science, and the best modes of preparing medicines and their compounds, and giving instruction in the same by public lectures," has, in pursuance of these objects, made the following arrangements for the approaching session, which will, it is hoped, meet the approval and support of all who desire, not only to improve themselves, but to see the general advancement of the science of Pharmacy in this country:

The course will open with an introductory lecture by Prof. John M. Maisch, on Monday, October 21st, at seven and a half o'clock P.M., which the medical profession are cordially invited to attend. The lectures on pharmacy and materia medica will be delivered on Monday, Wednesday, and Friday of each week, at seven P.M. These lectures will be fully illustrated in each department. A portion of the course will be devoted to the *leading principles* of *Botany*, with a view of illustrating their availability for the detection of spurious and adulterated drugs. The principal part of the course will be occupied by the *history, composition, properties, preparations, impurities, and adulterations* of all the *officinal* and most of the unofficinal drugs employed here and in Europe. Specimens of the genuine and spurious drugs, and of the plants from which they are derived, will be exhibited. The large and increasing cabinet of specimens belonging to the college will be used in this course. The valuable library is open for the use of students as well as members.

The lectures on chemistry will be given on Monday, Wednesday, and Friday of each week during the session, at eight o'clock P.M. This course, which will be thoroughly practical and adapted to the wants of the student, will include organic as well as inorganic chemistry in all its relations to technics, toxicology, and pharmacy.

Fees.—Tickets for either course, $10; for both courses, $15; Diploma fee, $5.

Graduation.—Each candidate for the diploma who has otherwise complied with the requisitions of the Charter and By-Laws of the College, shall, during the last week in January or August, present to the Secretary his name and a certificate of his age, also the lecture tickets required by the College (or in lieu thereof, a receipt from the Treasurer, for the payment to the college of such an amount as may be determined by the board of trustees to entitle him to an examination for the diploma), an original dissertation on some article of the materia medica, or a chemical analysis of some substance conducted by himself; all of which are to be laid by the Secretary before the next stated meeting of the board of trustees (the name of the candidate, however, not to be entered on the minutes), to be given in charge of a committee of examination (not less than three), appointed by the President, to act in connexion with the Professors. If satisfactory to the committee, they shall appoint a time for the examination of the candidate, and notify the Secretary to call a meeting of the board of trustees and professors, before whom he shall be examined; after which examination, on a vote of three-fourths of the trustees present, in his favor, his name shall be recorded as a graduate in Pharmacy, and his diploma shall be conferred by the President, or some member appointed by him for that purpose, at the next stated meeting of the college; provided, in all cases, that the graduate shall have attained the age of twenty-one years, when he shall pay to the Treasurer a Diploma fee of five dollars. Unsuccessful candidates shall have their papers returned to them, and shall be entitled to a future examination without additional expense.

Students who have attended two full courses of lectures in the college, shall be entitled to attend future lectures without charge, the tickets for that purpose shall be endorsed accordingly, and shall not be transferable.

PHILADELPHIA COLLEGE OF PHARMACY.

Robert Bridges, M.E., General Chemistry; William Proctor, Jr., Theoretical and Practical Pharmacy; Robert P. Thomas, M.D., Materia Medica.

The lectures in this institution will commence on Wednesday, October 2d, and terminate about the 1st of March. There will be held in the Hall of the College, Filbert street, on Mondays, Wednesdays, and Fridays, two lectures each evening at 7 and 8 o'clock.

The lectures on Chemistry will embrace in a systematic view the laws, operations, and results of this science, and its relations to pharmacy.

Organic chemistry will also receive its full share of attention, and all its compounds, possessing general or pharmaceutical interest, will be brought under consideration.

The lectures on Pharmacy will treat of the elementary operations required in the preparation of medicines; viz. weights, measures, and specific gravity, the management of heat, the manipulations in the processes of pulverization, solution, evaporation, distillation, crystallization, etc.; all illustrated by the most approved models, diagrams, and apparatus.

The lectures on Materia Medica will be exclusively devoted to vegetable and animal substances, their origin, commercial history, characters, composition, and medical properties, together with their adulterations and the means of detection. Experiments illustrative of the proximate organic principles and modes of their detection, with the difference between genuine and spurious articles, will be introduced whenever deemed interesting or important.

Graduation.—Every person upon whom a diploma of this College shall be conferred, must be of good moral character, must have arrived at the age of twenty-one years, have attended two courses of each of the lectures delivered in the college, or one course in the college, and one course in some other respectable college of pharmacy; *or when there is no such college organized in his locality, in some other respectable* [medical] *Institution in which the same branches are taught;* and have served out an apprenticeship of at least four years, with a person or persons qualified to conduct the Drug or the Apothecary business; *at least three years and three months of which must have expired before the examination*—of which circumstance he must produce sufficient evidence to the Board of Examiners. He shall also be required to produce an original dissertation, or thesis, upon some subject of the materia medica, pharmacy, chemistry, or one of the branches of science immediately connected therewith, which shall be written with neatness and accuracy. The thesis, with the evidence of apprenticeship and diploma fee, shall be deposited with the senior professor of the school on or before the twentieth of February, of the session in which the application shall be made. He must also be recommended in writing by the committee of examination and the professors jointly, and if his application be finally approved of by the board of trustees, he shall receive the diploma of the college.

The regular examination for the degree shall take place in March previous to the meeting of the board of trustees. A second examination will be held when required, in the month of June, of which those students, who may not have accomplished their term of service at the regular examination (and other qualified applicants), may avail themselves.

Fees.—Matriculation fee (paid but once to the Secretary), $2; Fee payable to each of the Professors, $8; Diploma fee, $5.

Students who have previously matriculated, and all who are apprenticed to members of the college, are exempt from the matriculation fee, but they must invariably obtain the matriculation ticket before the commencement of each course. Graduates and members of the college, and all students who have paid for two full courses of instruction in the college, are admitted to the lectures gratuitously.

Maryland College of Pharmacy—Baltimore.

F. Donaldson, M.D., Prof. of Materia Medica; J. Faris Moore, Prof. of Pharmacy; Alfred M. Mayer, Prof. of Chemistry.

The annual course of lectures of this College will commence October 15th, and be continued, tri-weekly, until the following March. They will be thoroughly practical and demonstrative, embracing, as fully as possible, the science of pharmacy under the three branches of chemistry, materia medica, and practical pharmacy. The additions which have been made to the apparatus and cabinets of the college, and which are constantly increasing from year to year, enable the faculty to supply illustrations of the best character in all the departments.

The terms of graduation, which will be rigidly enforced, are: Attendance upon two full courses of lectures, in a respectable College of Pharmacy; the last of which shall be in this Institution; the applicant to be of good moral character; to have served an apprenticeship of four years to the profession of pharmacy; to present an original dissertation of not less than ten pages, on a subject connected with one of the branches, and pass an examination before the faculty and a committee of the trustees.

Persons engaged in the wholesale drug business may attend the lectures, on complying with the regular terms, and after having attended two courses, presented an original thesis on some subject connected with the branches lectured upon, shown testimonials of good moral character, on passing an examination before a committee of the board of trustees, will receive a certificate of proficiency signed by the officers of the college.

The lectures will be delivered in the Hall of the College, second story of building owned by the Medical and Chirurgical Faculty of the State, No. 47 North Calvert street, according to the following arrangement, viz:—Chemistry from 3 to 4 o'clock, Monday and Wednesday afternoons; Pharmacy, from 7 to 8 o'clock, and Materia Medica, from 8 to 9 o'clock, Tuesday and Thursday evenings.

Students should be present at the commencement of the course, in order to derive full benefit from the lectures.

Fees.—Fees for each Professor's Ticket, $8; Matriculation Ticket (paid but once), $2; Graduation fee, $5.

American Medical Times.

SATURDAY, OCTOBER 5, 1861.

THE TRIAL OF PUBLIC BENEFACTORS.

"Happy the man," says an old moralist, "who has never had the misfortune to discover or invent anything useful or profitable to mankind." At the first blush no statement would appear more paradoxical. In all the wide world that man esteems himself the most fortunate who realizes the consummation of years of dreaming in the full perfection of a curious or useful invention. Every discovery in the arts and sciences has apparently made at least one man happy. From Archimedes to the last inventor of a Yankee notion, the ecstatic shout of every discoverer has been, Eureka! Eureka! And this burst of enthusiasm far less often gives expression to the unselfish gratification of genius triumphing over the "hidden things in nature," than to that inordinate and insatiable desire for fame, wealth, and ease, always existing in a state of expectancy in the human breast. We can conceive of no sublunary honors or rewards more likely to be acceptable to man, than to be known, through his inventions or discoveries, as a Public Benefactor.

But he alone is the correct observer of the sources of happiness and misery among men, who penetrates beyond the seeming and apparent, which gloss the present, and contemplates the ultimate bearing and effect of current events on the lives of individuals. And whoever thus pauses to reflect upon the subsequent lives of those who esteem themselves the benefactors of their race, by the utilization of a discovery or invention, will be forced to acknowledge that the proverb of the moralist has a profound significance. We know not what example he may have observed, where a life of toil in the patient search after truth, it may be through poverty, disappointment, and disgrace, but crowned with ultimate success, had been rewarded with the most relentless persecution and cruel defamation. He may have seen a student of science, after years of labor and sacrifice, educe a principle of world-wide application to the arts of living, only to have the remainder of his life rendered miserably unhappy by the assaults of slander and detraction. How rarely, indeed, does the public benefactor wear his wreath unchallenged by the tongue of envy! The history of many branches of science and art is but a continuous record of the struggles of discoverers to establish their just and honest claims to consideration. Nor does this conflict cease with the death of the devotee of science, but the tooth of envy and detraction ever gnaw at what of reputation may have survived, until this too is consumed, or until posterity may haply embalm it beyond the possibility of destruction.

While these remarks are true of science in general, they are eminently applicable to medicine. The noblest, most learned, most self-sacrificing, most magnanimous profession has been but a bear-garden from the time of its founder to the present. As a body it is united in fraternal and indissoluble bonds, against any and all attempts to harm its integrity, or impair its strength, while it is rent by intestine feuds, and distracted by personal assaults. Envy and jealousy rule the hour, and hunt down innocent virtue with a ferocity that knows no control. We need not instance examples; they will recur to every one in ample numbers. From Hippocrates to Morton—that Prince of persecuted Public Benefactors—from the first invention, to the latest modification of splints for the treatment of morbus coxarius, there is an unbroken line of martyrs. We claim to be students of the most progressive science in the entire circle, and yet the path of medical progress is marked with the crosses on which were crucified those who have ventured to take a single step in advance of their fellows. Whoever dares to raise his head above the common level, and assert a new principle, becomes at once the target at which a thousand shafts are launched, and too often by unseen hands. With a certain class of medical men, we know of no greater stimulus to research than the announcement of a new invention in the mechanics of our art, or a new principle in its science. Busy hands are at once at work in our libraries, musty volumes are rudely taken from their dusty retreats, medical journals through long unindexed series are consulted page by page, modern Latin, old French, obsolete German text, are deciphered, and in due time an elaborate article appears, proving conclusively that this contemporary discovery was well known, or at least hinted at, in some former period. We are amazed at the revelation, and marvel that so little should be known of it in our day. In our surprise we forget the just claims to our gratitude of him who has reproduced and utilized a principle, dimly perceived, perhaps, and but obscurely apprehended by his predecessors. Reclamation and crimination follow, and though our knowledge of the past may be advanced, it is at the expense, too often, of the just reputation, may be life-long discouragement, of a worthy member of our fraternity.

In our experience as medical journalists we have long since come to commiserate in advance the man who is about to make public something new in his profession. Whatever may be the character of the discovery, whether a new elementary body in nature, a new remedy, a new physiological or pathological process, or a new surgical instrument or appliance, we can assure him that his claims to novelty will be disputed. We may refer to hundreds of examples within our recollection where the medical enthusiast, after long and patient effort, has committed to the public press his claims to discovery, only to meet with the tender epithet, "plagiarist." Who doubts that Sims utilized the silver suture, and yet a long and elaborate essay has been written by an Edinburgh Professor to prove that *metallic ligatures* were previously used! Thomas has demonstrated the best method of treating a prolapsed funis, but a contemporary writer has shown that a London obstetrician once recommended the same practice. Reid has taught by dissections the most obscure practitioners how to reduce a dislocated thigh, but a learned neighbor has discovered that this operation has been *accidentally* performed many times before. Galt invented an ingenious trephine, but the moment it was made known many of the old operating cases were found to contain somewhat *similar* instruments. Sayre illustrated a new instrument with which morbus coxarius could be cured, when a half dozen of the same sort, long since invented, were brought to light.

We do not desire to deprecate free criticism on the utility, and even originality of inventions and discoveries. But we must protest against that carping and cynical spirit, so prevalent in the profession, which always strives to destroy, and failing, to lessen the merits of those who really advance the science of medicine. The man who renders useful and practical, in his own age, the neglected and useless ideas of a past generation, is equally, and indeed often far more, entitled to our esteem than the original discoverer. Whoever is imbued with the liberal and catholic spirit of medicine does not stop to dispute with every one who lends him aid. Accepting with gratitude every means by which his progress can be advanced, he has no time to defame his fellows, and no disposition to question their sincerity. Were this the spirit that animated every member of our profession, what causes of endless wrangling would be removed? What sources of jealousy and heartburnings would be for ever obliterated? In all earnestness, we urge the cultivation of that fraternal charity, which suffereth long and is kind, envieth not, thinketh no evil, and rejoiceth in the truth.

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THE WEEK.

The Hygeia Hotel Hospital and its management having become a subject of needless controversy, we feel constrained to say to the many correspondents and inquirers concerning it, that it is time the controversy were terminated. With the following brief statement of the facts in the case, which we feel authorized to make after an examination of the evidence before us, we close our columns against all further allusions to the subject. It appears that upon assuming command at Fortress Monroe, General Butler, from considerations that he deemed sufficient, requested a well-known and highly reputed surgeon, Gilman Kimball, M.D., of Lowell, Mass., and then in charge of the Military Hospital at Annapolis, Md., to leave the latter place and take charge of the Hygeia Hotel Hospital that had just been established by Dr. Cuyler, Surgeon U.S.A., and Medical Director of the Department. Obeying the summons, Dr. Kimball was at once installed Chief Physician and Superintendent of the Hotel Hospital, by the sole authority of General Butler, to whom he naturally felt that he owed implicit obedience as a civilian commissioned by him, and already legally engaged under that commission, by the Medical Bureau for service at Annapolis. The sudden influx of an unprecedented number of troops at Fortress Monroe, the prevalence of measles, and the tardiness of supplies from the Purveyor's department at Washington, had furnished the new military commandant peculiar opportunities for complaints of inadequacy of hospital supplies, etc.; these were his apologies for proceeding to the reorganization and furnishing of the Hospital, independently of the Medical Bureau, or its official Director in that department of the Army. But all who know Dr. Cuyler must believe that he neglected no proper official measures for the requisite outfit of the new Hospital. And those who are familiar with Dr. Kimball's reputation, and manner of *doing what is to be done*, will not be surprised at what was done at that Hospital under his superintendence. By order of General Butler, the bedding and furniture of the old hotel were converted to the use of the Hospital; attendants, professional, non-professional, and contraband, were employed with the General's sanction. Nurses were sent by Miss Dix, that had been trained at Kaissersworth and by Pastor Passivant; eight other women came on from Massachusetts, and soon the great hotel was transformed into a well-appointed hospital, with abundant supplies of delicacies, etc., from private beneficence. Though the means by which this reorganization had been effected were not *en règle*, the excellent facilities for the care of the sick are confessed by all who have visited the Hospital. For all this DR. KIMBALL deserves the commendation he has received. Upon the retirement of General BUTLER, DR. CUYLER resumed official and personal care of the Hospital, and is conducting all its affairs in his usual systematic manner, and with all the facilities he requires, the women nurses and contraband servants included; and we are glad to know that perfect confidence and good will exist between him, the regimental surgeons, and the military authorities. The Government has now legalized the employment of women as nurses, and student cadets as dressers, and, best of all, has ordered that whatever is needed for the patients shall be furnished by the Commissariat. This is as it should be, and will prevent such infelicities as those attending General BUTLER's bold innovation and independence in the control of the Hygeia Hospital. While we honor DR. KIMBALL for his patriotic personal sacrifices, and his loyalty to his General, we cannot see that any benefit can result from discussing the causes or the consequences of this episode in the Army Medical Service, for the recent action of Congress, and the increased means of the Medical Bureau, have provided against such contingencies as General BUTLER believed to exist when he took command of Fortress Monroe. As to DR. KIMBALL, his reputation as an intelligent and skilful surgeon has been too long well established to suffer from anything that may be said by persons who misapprehend his relations to the weighty responsibility that was thrown upon him by the Military Commandant, and authorized by the Secretary of War. We venture to believe, that with every honorable man in the profession, he would frown upon any *violation* of the carefully ordered system of the Army Medical Staff.

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THE City Inspector has communicated to the Charter Commission his views of reform of the sanitary police of New York. It is an interesting report, and though it contains absurdities, is on the whole the most sensible document which ever emanated from that quarter. It seems, from this report, that medical men are utterly incapable of giving judicious advice in sanitary matters, whether from the peculiar nature of their studies and business or not, we are not informed. Rejecting the "Doctors," the City Inspector "takes counsel with his own practical experience," which extends over two years, and proceeds to develop his plan of a Health Department. The basis upon which he would erect the organization is the dispensary system. After paying a well-merited compliment to the Dispensaries, as great public charities, he says:—

> "Here, then, in these dispensary institutions is found at once material for the basis of an enlarged sanitary improvement, and an efficient sanitary police, always on hand, always watchful and observant of the health of the city. The organization of these institutions is so admirable, that I would not venture to interfere with it in the slightest degree; but while it is certain that within its present sphere of usefulness it is without rivalry, it is suggested that this sphere may be so extended as to give it greater responsibility and power, by connecting it in a more definite form with the organization of the Health Department of the city. I propose then, that a new Board of Health be formed, to consist of the Mayor, City Inspector State Health Officer, Chairman of the Commissioners of Public Charities and Correction, President of the Commissioners of Emigration, Presidents of the five Dispensaries, *ex officio*, and three physicians to be chosen by each of the Boards of Trustees of the five Dispensaries, to serve during the pleasure of the appointing Board. This plan makes a majority of the Board of Health medical men."

One important objection to this plan has escaped the City Inspector, and that is, a majority of the members of the Board of Health would be "doctors," and what guarantee has he that they would not embarrass its action by their "disagreements," which he thinks has become a "chronic complaint." He continues:—

> "As an additional measure of reform, I would recommend the abolishment of the present system of Health Wardens, and the consolidation of these officers in the Visiting Physicians of the dispensaries, who are to receive as compensation the pay now allowed to the Health Wardens. In effecting this change, the city will have the safest security that its interests will be attended to with promptness and efficiency by a body of men in all respects qualified for their duties. As no political considerations or partisan interests are liable to come in conflict with a body constituted on the basis of fitness and capacity, it can hardly be questioned that the change will be approved by all classes of our citizens. It is so simple in its plan, and so unencumbered with the machinery of the existing system, that it will adapt itself to the public wants without the slightest disarrangement of its parts, and it may quickly be put into operation, with no fear of disorganization, and with no additional expense to the city."

This is a most sensible arrangement, and was long since proposed by the Academy of Medicine. The City Inspector complacently sets forth the peculiar fitness of a man of about his abilities and education for the position which he now occupies. Any knowledge of medicine would evidently disqualify a person from acting in that capacity. All that is required are "practical abilities and common-sense qualifications." No medical man has ever exhibited such superlative qualities! The city is most fortunate in having one such citizen, who has kindly consented for two years to act as a "Conservator" of its public health. May we not hope, if the suggestions of this report are adopted by the Charter Commissioners, that the services of the present City Inspector may be secured in the new and more important office which it would create, viz. Health Officer General!

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THE Introductory Report of the New York State Medical Society's Committee on Drainage as a Sanitary Measure, has been favorably noticed; and we think it is incumbent upon the members of that society, throughout the State, to encourage and aid the important work undertaken by the Committee, by the contribution of facts and suggestions, in accordance with the plan proposed in their circular of last year.

This is the season for studying the phenomena and etiology of miasmatic diseases. The results of such observations should be sent to members of the Committee, which is composed of the following gentlemen:—Dr. ELISHA HARRIS, Chairman, 253 Fourth Avenue, New York; Dr. WM. P. SEYMOUR, Troy, New York; Dr. GEO. W. BRADFORD, Homer, New York; and Dr. ORTON, Binghampton, New York.

The nature and plan of the work will be seen by referring to the last volume of the Society's Transactions, and every medical observer in the State should contribute something to the Committee's fund of facts.

Reviews.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. By GUNNING S. BEDFORD, A.M., M.D., Prof. of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; Author of "Clinical Lectures on the Diseases of Women and Children." Illustrated by Four Colored Lithographic Plates and Ninety-nine Wood Engravings. 8vo. pp. 763. New York: Samuel S. & William Wood, 389 Broadway. 1861.

THE announcement of a new book upon the principles and practice of midwifery naturally suggests the inquiry: Is such a work needed by the profession? To this it may be replied, that although the great facts upon which obstetrical science is based are already well presented, it is evident that from time to time, in this as in every other department of medicine, the necessity arises for important additions to books previously in use, requiring the labors of editors or annotators, or that entirely new works should be written, embodying recently discovered facts in physiology and new practical suggestions. That this necessity has been recognised, is shown by the fact that some of our most popular and really valuable text-books would fail in important particulars to represent the present state of knowledge and opinions in regard to obstetrics, were they deprived of the annotations of American collaborators, and left as they were presented after the most recent revisions by their authors.

We conceive, then, that no teacher or practitioner of midwifery need feel that he exposes himself to the charge of presumption in offering a treatise upon midwifery, which claims to present the acknowledged facts of the science, and to incorporate the most recent discoveries and opinions; provided he keep distinctly before the reader the difference between facts and principles long agreed upon, and those upon which there may yet be properly a difference of opinion. A work claiming this is entitled to respectful consideration; and if its author has accomplished his design, he will achieve the success which is the reward of his laudable ambition.

Of the various treatises upon midwifery, we shall find that the most prominent are marked by characteristics peculiar to themselves, incident, if we may so speak, to their paternity—bearing more or less distinctly the impress of the minds of their authors, and thereby rendered peculiarly valuable to one and another class of readers. For instance, the recent complete work of Cazeaux is an immense storehouse of facts—an encyclopædia of obstetrics—invaluable as a work of reference, but for that very reason not so acceptable as a text-book. While Churchill presents a generally satisfactory account both of the science and art, it is undeniable that to the statistical portion the work owes the deservedly high position it has gained in medical literature. Tyler Smith's Lectures, republished in this country as a text-book, is the richest contribution to the science of obstetrics that has yet been given to the profession; and the author has placed not only the student but the practitioner under the deepest obligations for the plain available resumé thus afforded, of the latest discovered facts connected with the physiology of reproduction as well as parturition. Still these Lectures are deficient in practical details so important in the lying-inchamber, which the student desires so much to know. The work of Ramsbotham we have always regarded with great affection. Its simplicity of style commends it to our confidence, and we have turned to its pages for advice, as we would seek the counsel of an instructor who had won our confidence and heartfelt esteem. But it cannot be denied that but for the annotations of Dr. Keating, its accomplished American editor, the work of Ramsbotham would now be regarded, in some particulars, as behind the times; and so with others.

Though a work containing the latest contributions may be expected, for that reason alone, to receive attention, it is nevertheless plain that he who publishes a book upon the principles and practice of midwifery will find it exposed to comparison and competition with others already possessing the confidence of the profession. To venture upon such an enterprise may be a light thing for one who has no reputation to lose; but he whose name is already associated with success in medical literature, should possess an unhesitating confidence in the belief that he either has something new to write, or that he can write upon old things more acceptably than those who have preceded him.

It is known to all, that the profession of this country are indebted to Dr. Bedford for the establishment of a clinique for the diseases of women and children. The publication of the simple records of this clinique placed him among the most successful authors in this department of medicine. That the book met a want in the profession, has been abundantly proved by the demands for the repeated editions through which it has passed, the unanimous verdict of foreign, and, we believe, of home reviewers, and the circumstance of its having been recently translated into French and republished in Paris, with large additions by its editor. In his work on the diseases of women and children the author enjoyed the advantage of occupying a new field, as every one who has examined the book will feel convinced; in the present instance he enjoys no such advantage.

The work before us is presented in the form of lectures to the author's class. We already have "lectures" upon midwifery by several writers of eminence, as for example those of Rob. Lee, Murphy, and Tyler Smith. These, however valuable to the practitioner, do not possess the completeness required for text-books, and were published more especially to illustrate particular subjects. The scope of our author's plan is more ample; inasmuch as he seeks to present a work which by its range and completeness of discussion shall meet the wants of the teacher for a text-book, while the style of lecture affords certain advantages for engaging the attention and adapting illustrations to the wants of the student.

The author of this volume has been a teacher of obstetrics in one of the most prominent medical schools of this country for nearly twenty years, and has had a field of practice which entitles his teachings to respectful attention. We propose to examine it somewhat critically, in order to answer the inquiry how far it deserves the favorable consideration of the practising physician, and if it furnish the student a full, satisfactory, and reliable guide in his studies. An American book, we think, is fairly entitled to such an examination in the pages of an American journal of medicine. We can present but few of the points which would prove of interest to our readers, but they will suffice, as we believe, to confirm in their judgment our own estimate of its merits.

The special anatomy of the organs involved in reproduction is of course the basis of obstetrical science. Our author follows the plan of most of his predecessors in considering first the anatomy of the pelvis. To this no objection can be taken, though we regard as more philosophical, the plan which more distinctly acknowledges the influence of modern physiological research, by commencing with the history of ovulation, and describes successively the development of the ovum, and the structures designed for its retention during its development, and its expulsion when mature.

In the first lecture, the student is exhorted to study diligently the mechanism by which nature accomplishes delivery. With such knowledge, he is prepared to interpose for her relief when her processes are interfered with, but without it, his efforts will prove misguided and injurious.

"Allow me, then, thus early, to urge upon you a profound respect for nature; her temple is the proper place for the student of midwifery; there it is that she discourses most eloquently, though silently, and the best obstetricians will be those who have worshipped the most zealously at her shrine."

The description of the bones of the pelvis is accompanied by suggestions touching points of practical importance, giving the impression, which we shall find confirmed as we advance, of the practical character of the work.

In the second lecture, we have the articulations of the pelvis and a description of its planes and axes. From its intimate relation to the mechanism of labor, this is a subject of prime importance. We are glad to see that Dr. Bedford follows the description of the "inclined planes," by which the pelvis is divided by two imaginary vertical planes crossing at right angles, and forming two anterior and two posterior inclined planes upon which the head rotates. Simple as is the subject of the mechanism of labor, we are satisfied that not a few of our graduates from medical colleges fail to comprehend it, or to appreciate its importance in practical midwifery; and we have seen the practitioner of years persist, in the face of remonstrance, in dragging the fœtus downward and forward in the direction of the axis of the outlet of the pelvis, thereby producing serious laceration of the perinæum. The importance of this knowledge is fully urged in the pages before us.

In the description of the fœtal head, attention is called to the circumstance that the measurements that have been recorded in this country are considerably larger than those given by English and Continental authorities. The same holds good, for the most part, in regard to the dimensions of the pelvis, as given by authorities at home and abroad. No satisfactory explanation of this can at present be assigned. The increased size of the head of the male over that of the female at birth, first pointed out by Dr. Clarke of Dublin, and more recently by Prof. Simpson, and its relations to protracted labor and increased mortality of male infants, are considered somewhat at length in a note. The recent observations of Dr. Veit of Prussia are quoted. Dr. V. does not consider the difference of diameters sufficient to account for these acknowledged facts, inasmuch as in 2550 cases he found the difference in the circumference between the heads of males and females to be *six lines*. Now, this we conceive to be abundant difference to account for the influence upon the results of labor which is claimed. The influence of a comparatively small difference in the size of the head, in affecting the progress and results of labor, we are in the habit of illustrating by the fact, that the difference of one *size* of the hatter, or about one half inch in the circumference, is sufficient to determine if a hat fit or ill fit an adult head; and the difference in an infant is of course proportionately much greater.

There follows an exceedingly clear and satisfactory account of the various classifications of positions of the head, and of the views held by the two schools represented on the one hand by Baudelocque, and on the other by Naegelé, as to the relative frequency of different positions of the vertex. Dr. Bedford recognises only the right and left occipito-anterior, and the corresponding posterior positions, alluding to the remainder as exceptional. Nothing is now more generally admitted, than that the head, in vertex presentations, at the commencement of labor, is found for the most part, with its occipito-frontal diameter corresponding with one of the oblique diameters of the brim, and that it is by far more frequently found in the right oblique; and that in about eighty per cent. of all cases, the vertex is found in the left occipito-anterior position. On this latter point all authorities agree, but there has been a difference of opinion as to which is the second in frequency. Baudelocque, and English writers of former years, taught that the position next in frequency is the right anterior occipital. Naegelé, however, has shown that while the left occipito-anterior position is the most frequent, the opposite or right occipito-posterior is the next in frequency. This view has been confirmed by Dubois, Stoltz, and almost all recent observers. Of its truth there can be no question. We are satisfied that those who are accustomed to trace carefully the movements of the head during labor, from the earliest period at which they are called, will have frequent opportunities of verifying the fact. Naegelé has taught us the great practical lesson, exemplified by our author in his lecture on mechanism of labor, that in these cases the vertex, in almost every instance, during the descent of the head, rotates forward to the right acetabulum and eventually emerges from under the pubes. Labor of course is proportionately tedious, in consequence of the greater distance travelled by the occipital extremity of the occipito-mental diameter before it can emerge from the pelvis. We are persuaded that this is not an infrequent cause of delay in labor when no disproportion can be detected. The views of many of our leading obstetricians have undergone a change upon this question within a few years, as is seen, for example, in the last edition of Ramsbotham; and we are pleased to see that our author has adopted those of Naegelé, though some still dissent.

With a full appreciation of the importance of an understanding of the mechanism of labor, our author devotes to this subject the fourth lecture. The various movements of the head are clearly described, and plainly illustrated by the admirable figures. The exact position of the head at the commencement of labor, or after the early contractions have acted upon it, is described in a note.

The great advantage afforded by a knowledge of the mechanism of labor is impressively illustrated by a supposed case, in which delay has been caused by failure of flexion, and the child doomed by the attendant physician to destruction by craniotomy. It is not to be understood, however, we presume, that our author regards the failure of flexion as of frequent occurrence. On the contrary, it must be very rare; failure of rotation much more often calls for instrumental interference.

Lecture six contains a very lucid and comprehensive description of the external and internal organs of generation, presenting practical hints of great importance.

In the description of the uterus, our author presents the most recent discoveries respecting the muscular structure, circulation, and lining membrane of this organ, for which we are indebted to microscopic researches. On this subject our author's descriptions are fully up to those of the best authorities. We are glad to see that he disavows the professed discovery of Jobert, that the projecting portion of the cervix uteri is destitute of nerves. This heresy, for such it deserves to be called, though nowadays a favorite with some, has been productive of much mischief. It has been fashionable to cut and carve the cervix at pleasure, as if it were not deserving of consideration, but we have known most threatening results follow these practices. We are not unmindful of the acknowledged differences of structure and function of the cervix and body of the uterus, and of the difference in nervous supply, and of the comparative impunity with which lesions are inflicted upon the cervix, but such notions as we have alluded to, deserve to be classed with the doctrine advanced by an individual subsequently referred to by our author, who declares that the lining membrane of the uterus itself is as insensible to impressions as "the interior of a gutta-percha bottle."

In lecture seven, we have a most admirable account of menstruation. The "modern" theory of menstruation, and the reasons for its support, are presented with great clearness. Our author loses no opportunity of presenting the practical bearings of every subject which he treats, and here we find a most impressive account of the reciprocal relations of the general and uterine systems, from which we should be glad to quote, if we had space, some of the best examples of the professor's style of writing. While considering the various circumstances that tend to accelerate or to retard the appearance of the menstrual function, as climate, temperament, constitution, race, etc., our author portrays the evil influence of education and mode of life upon the health of our females, with a vividness of relation that renders it worthy to be read in homes which it will never reach. Comparing the life of girls in the country with that of those brought up in the city, and speaking of the former he says, that "their moral and physical education is usually calculated to improve the mind and fortify the body," while the philanthropist will find cause enough for lamentation, in the fact that

> "City life, with its rounds of excitement, its prurient books, and no less prurient dance, has forced into premature action the nervous system of the young girl, and thus entailed upon her the melancholy results of this contravention of the laws, which nature has declared essential to health."

While these evils are doubtless found in their extreme development in the city, it is, nevertheless, a painful truth that, in consequence of the facilities of communication between cities and the surrounding country, the contaminating influence of city habits extends for a large area around these great centres, and the "healthy country girl" of our author has become almost an ideal character, of which the original is to be found only in rural districts remote from cities.

Attention is called particularly to the pathological phenomena that may accompany the "critical period" of females. The decline of the sexual life of the female is thus gracefully described.

> "Should the female escape the dangers incident to this period of existence, she will, as a general rule, pass on, with the enjoyment of health, to a ripe old age. The spring-time of life is over, and she now lapses into the cold shades of winter. One of her great offices has been completed; she has fulfilled her destiny in the birth and tender care of her children, and she now lives to guide them by her counsels, and rejoice in their position as useful members of society."

If, during the continuance of menstruation, the ovule should not be impregnated, it perishes as deciduous matter.

> "Indeed, the ovule, at this special period of its maturity, is not unlike the luscious peach, as it hangs in full ripeness and flavor from the parent tree—if there be no hand to pluck it in its tempting richness, it falls to the ground and decays."

In Lecture eight, the accepted facts in relation to reproduction are presented in a highly interesting manner, though the full consideration of many interesting circumstances connected with the propagation in the vegetable and animal kingdom, did not fall within the scope of our author's design in these practical lectures.

Is pregnancy a pathological condition? Our author, in the ninth lecture, discusses this question in connexion with the account of the changes in the uterus, the constitutional sympathies evoked, and the changes in the blood during gestation. The conclusion at which he arrives is, that pregnancy is a modified condition of the system, but not a diseased condition; oftentimes complicated with disturbed action amounting to disease, which will require all the vigilance and a full measure of the skill of the practitioner to arrest.

The remarks on this subject are highly practical, and will repay careful perusal.

This lecture closes with general observations on the importance of a familiar acquaintance with the evidences of pregnancy. This highly important subject occupies a large space, the three following lectures being devoted to its consideration. It is but just to say, that our author has exhausted this subject, and has presented the various signs of pregnancy in so clear and attractive a manner, that nothing could advantageously be added. Every fact that the most recent investigations have brought to light, bearing on this subject, is here presented. For example, in describing the changes in the mammæ, he remarks that—

> "Charles Robin has pointed out an extremely interesting fact in reference to the true physiological relations of the mammæ to the uterus during the progress of pregnancy. He has shown that there is a correspondence in the development of the tissues of the uterus, and the glandular culs-de-sac of the mammary organs. These glandular culs-de-sac, in a state of partial atrophy when gestation does not exist, become cognisable, and are lined with their epithelium at the time the fibre-cells of the uterus undergo an increase in volume."

Our author believes that he has observed a change in the cervix, peculiar to pregnancy, not described. "I allude to a peculiar moisture of the two lips, which, according to my experience, is a constant accompaniment of pregnancy. The moisture is occasioned by the pouring out of mucus, which is nothing more than the necessary result of an increase in size of the mucous follicles, which, you are aware, are found in more or less abundance on the internal surface of the cervix."

Our author's denunciation of the popular error that the production of abortion before quickening is at least a venial offence, is most hearty, and he exhorts his hearers, that in the exercise of their prerogatives, as medical men, whether in the chamber of sickness or on the witness stand in courts of justice, they should remember that he "who from sordid motives, or with a view to conceal his own crime, shall produce abortion, is in the eye of Heaven equally guilty of murder, whether the act be perpetrated before or after quickening." The profession may properly congratulate itself upon the improvement of public sentiment—as indicated by the action of certain State Legislatures—that has been brought about by the perseverance of medical men in presenting the truth upon this subject, and yet, alas! how much remains to be done. Many, very many of our females, including some possessing high moral sense, and even religious principles, regard the destruction of their offspring before quickening as no violation of good morals.

An interesting and most instructive case is cited, occurring in our author's practice, in which he allowed himself to be deceived by symptoms simulating quickening. It is related for the purpose of illustrating the readiness with which such errors in diagnosis may be committed. The whole narrative is truthful to the life, and in it we imagine few will fail to recognise a resemblance to the history of some similar case in which, at some time in their experience, they have been misled from similar causes. The danger to which the incautious practitioner is exposed, of allowing himself to be deceived by designing women into expressions of incorrect opinion, or worse than that, into errors of practice, is set forth with great earnestness and fidelity; and we are free to say, there is no friend to whom the practitioner, when embarrassed by difficulties in such cases, can apply with more confidence, than to those pages of our author. We cannot forbear to quote the following:

> "Sometimes young unmarried women will apply to you for professional advice, and beg you to give them medicine to make them regular. They will tell you, apparently, a very consistent story. It is not unusual for them to have a protuberant abdomen, and if you inquire about it, they will say, 'It is only a swelling they got since they caught cold,' or something equally satisfactory. Should you place your hand on the abdomen, and recognise the movements of the fœtus—not unlikely to occur in some of these cases—and ask the woman if she has ever noticed this peculiar motion, you will be surprised, gentlemen, at the ready coolness with which she will oftentimes reply, 'Oh! yes, doctor, I am dreadfully troubled with it—it is wind in my stomach!'—You must be on your guard—a woman who has fallen, is generally well versed in the wily tricks of life; and she will bring every subterfuge to bear in the hope that she may conceal from public view the evidences of her own shame!"

We are persuaded that the conviction to which every practitioner of experience has arrived, though reluctantly, is that expressed in the forcible but homely language of Gooch, to the effect, that "women's words are not to be believed, but their bellies."

It is out of our power to do more than allude to a few of the particulars embraced under this most important head. The directions for auscultation and ballottement are all that are required, and the value of the results afforded by such explanations properly estimated.

A most admirable description follows in Lect 13, of the mode of conducting an examination, with a view of determining the question of Pregnancy in any given case. First, we have the various abdominal enlargements for which pregnancy may be mistaken, or the reverse, and the diagnostic marks of each, followed by lucid, practical directions for conducting the explorations requisite for furnishing the evidence upon which the opinion is to be based.

The description of the mode of conducting a vaginal examination affords a good illustration of our author's happy and familiar manner of describing even the simplest of the duties required of the obstetrician.

The different varieties of extra-uterinæ pregnancy are considered in Lect. 14, with the phenomena, the diagnosis, its dangers, and the treatment of each kind. This chapter will be read with interest by those seeking information on that subject.

Lectures 15 and 16 are devoted to the diseases of pregnancy. A portion of these consist of an exaggeration of the various sympathies that occur in ordinary gestation, and constitute the symptoms by which it is recognised, and the derangements and discomforts due to mechanical pressure of the gravid uterus or its deviation from the normal position. This highly practical subject is so thoroughly treated that but little, if anything, could be profitably added.

In Lectures 17 and 18, we have an account of the fœtal membranes and the placenta, and of the whole subject of the nutrition of the fœtus. It is sufficient to say, that these lectures embody the generally accepted opinions of physiologists, and the most recent reliable observations, some of which are not, so far as we have seen, embodied in any other systematic work.

The recent researches of Mr. Whitehead have served to give a definite shape to the impressions that have prevailed in regard to the frequency of abortions, and to afford a basis by which such frequency may be approximatively estimated. From his observations, it would appear that 37 of every 100 mothers abort, before the age of 30 years; and that this accident occurs in nearly 90 per cent. of those females who continued in matrimony until the final cessation of the menses. This, among other considerations, is urged by our author in behalf of a careful study of this subject. Dr. Bedford thinks that Madame La Chapelle's opinion, that abortions occur more frequently at the sixth month of pregnancy, may be true of persons admitted into hospitals, but is not true of women as met with in general practice; and that other things being equal, abortion is most frequent in the early months: say from the first to the third month. There can be no doubt that this accords with general experience.

Our author, in considering the causes of abortion, attaches due importance to the reflex irritations excited in the stomach, rectum, bladder, &c. He illustrates the doctrines of Marshall Hall, now happily so familiar to all well-educated physicians, and which find some of their happiest illustrations in the phenomena of abortion and labor, as has been elaborately explained by Dr. Tyler Smith. In the light of physiology it is easy to see why it is that hemorrhoids, collections of fæces in the rectum, irritation of the vagina from excessive sexual intercourse, strangury from cantharides, tenesmus from dysentery, irritation of the mammary glands in suckling, toothache, cold bathing, &c., may by reflex influence induce premature action of the uterus and loss of its contents. Beside these, central causes, including changes in the uterus, and character of the circulating fluid, may at times produce the same result.

Cases of habitual abortion often tax the resources of the practitioner to their utmost. The causes of this are considered, and judicious directions given. Our author remarks that it is with him a rule to enjoin more or less quiet in the recumbent position until the expiration of the fifth month. He does not allude to the expedient successfully resorted to by some under certain aggravated cases, of compelling absolute rest until after quickening. Most complete and satisfactory directions are given for the management of abortion under all the principal conditions in which it may occur. Our author's employment of belladonna in threatened abortion is based upon a somewhat novel view of its operation. With its use for the purpose of favoring dilatation of the os uteri the profession are familiar. Dr. B. remarks, that "it is well known that it exercises a marked influence on the bloodvessels of the uterus, as upon those of the iris, intestines, &c., causing them to contract, and consequently relieving them of their congested condition." He introduces it in the form of a suppository of the extract into the vagina or rectum, preferring the latter; and confidently recommends it as "one of the most effectual means of arresting a menaced abortion." He draws attention to the necessity of removing all sources of reflex irritation so far as practicable.

The true danger of abortion, to the mother, is hemorrhage; and it is an exceedingly nice point to determine when the hemorrhage is so profuse as to render it essential to induce the expulsion of the ovum. This must be left to the judgment of the practitioner in any given case. It is satisfactory to receive the author's assurance that he has "known *women to lose immense quantities of blood in a threatened abortion, and to be apparently moribund from exsanguification, and yet they have rallied, and gone on to the full term.* These latter examples, however, are exceptions to the general rule."

Dr. Bedford would not hesitate in any urgent case, the os being yet undilated, to introduce a sound or female catheter within the os uteri, and thus hasten the dilatation. He makes no allusion to the expedient recommended by Dr. Cary, of detaching the ovum, by sweeping the interior of the uterus with a loop of wire curved moderately upon itself, after the manner of the vectis. We can see no objection to this expedient when it is done with due regard to the delicacy of the structures; and that such detachment of the ovum is followed by cessation of the hemorrhage there can be no doubt, if we may credit the success of reported cases. The similarity between this expedient and the artificial detachment of the placenta as recommended by Simpson is apparent. Dr. Bedford repudiates all mechanical means, as hooks and forceps, for the removal of the retained ovum, regarding the fingers as all-sufficient. In most instances, one or more can be carried within the uterus, if the os be well dilated, especially if somewhat firm counter-pressure be made over the uterus to force it within reach of the finger; but there are cases in which most practitioners will find mechanical contrivances indispensable to the removal of remaining portions of the ovum. "In the event of alarming prostration from loss of blood, there is no remedy more efficient in bringing on reaction than teaspoonful doses of laudanum and brandy in a wineglass of strong coffee, every ten, twenty, or thirty minutes, according to the requirements of the case. Be not afraid of this remedy, it is the sheet-anchor of hope in cases in which the patient is almost sinking from exhaustion consequent upon profuse hemorrhage. But, of all things to be remembered, see that the uterus is well contracted, and not in a state of inertia, for it would be the essence of folly to attempt to control the exhaustion while the waste gate is still open. In abortion, as in delivery at full term, flooding is always one of the results of inertia of the uterus."

Modern investigations have given much precision to our knowledge upon the subject of molar pregnancy; the grave moral questions sometimes involved in these cases, affecting the chastity of the unmarried woman as well as the conjugal fidelity of the married, render it one of great practical importance.

Confused notions on this subject have prevailed from the circumstance, that while the settled convictions of many best qualified to judge, have been that all fleshy masses expelled from the uterus are due to previous conception, not a few contended that a more charitable explanation of their origin is in some cases allowable, without attempting to define the distinction upon which such opinions were based. Our author has for many years maintained in his Lectures this latter view. It is now well understood that organized growths expelled from the vagina must be divided into two classes. 1. Those that are the product of conception; 2. Those that are produced independent of sexual intercourse. Thanks to the investigations of modern science we know that the characteristics of each are indelibly impressed, and the means thereby placed in the power of the physician of pronouncing positively upon the nature of any such product. He is thus prepared to prove himself not only the energetic but intelligent defender of character when unjustly assailed.

Our author gives an interesting account of the investigations of Mettenheimer, Paget, and others, in relation to the formation of the hydatid mole as the result of degeneration of the villi of the chorion. Whether such degeneration precedes and occasions, or merely follows the death of the fœtus, is still a question. The placenta may exhibit partial hydatid degeneration even in normal pregnancy, the fœtus being expelled fully developed; but in others the fœtus perishes early, and the placenta degenerates into an anomalous mass in which the villi of the chorion may upon search be recognised. The degenerated ovum, though generally expelled early, will occasionally remain a long time within the uterine cavity, and being expelled at a period remote from the time of the husband's departure, or from the period of his death, may give rise to questions of her chastity. Under these circumstances the woman's character can only be protected through the intelligence of her medical attendant.

There is also a *carneous* or fleshy degeneration of the placenta, which our author does not distinctly describe, which is much more common than the hydatid degeneration, and is not unfrequently met with in miscarriages. Every vestige of fœtus and funis has disappeared, but on examination more or less of the cup-like elevations of the decidua may be seen. Our author elsewhere alludes to the fatty degenerations of the placenta, which so often precede the death of the fœtus.

> "False moles embrace all the substances formed in the uterus, in no way connected with impregnation—such as polypoid and fibrous growths, blood clots, the membrane of congestive dysmenorrhœa, and, perhaps, the true uterine hydatids denominated acephalocysts. It may be mentioned here that the mucous polypus has often been confounded with the mole due to a previous fecundation.
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> "Young girls will sometimes, after extreme local suffering, expel substances more or less solid from the uterus; in cases like these, the medical man cannot be too much on his guard,—a shade of doubt expressed by him will immediately be interpreted adversely to character; and rumor, with her thousand wings, will soon consign to infamy the purest and most spotless. Remember, gentlemen, that the young girl who has become the object of suspicion is worse than the withered flower.
>
> "If her chastity is once questioned, no eloquence can appease the credulons in her behalf—no proof can emancipate her from the damning influence of suspicion—there she is, repulsed and scorned, although as immaculate as purity itself!
>
> "Look to it, then, and see that you do not sacrifice character by hasty and unjust decisions."

Among the various substances liable to be mistaken by the incautious or inexperienced, for the results of impregnation, are the casts of the mucous membrane thrown off from the internal surface of the uterus in congestive dysmennorrhœa, especially as the expulsion is frequently preceded by recurrent pains simulating the throes of labor. Besides these, fibrinous masses, the result of coagulation of effused blood, also are met with. In all these cases the entire absence of all structures peculiar to the ovum proves conclusively that their origin is entirely independent of conception.

An important question arises, can true hydatids form in and be expelled from the uterus? Cruveilhier described the essential difference between the vesicles of the hydatid ovum, and the true hydatids, which are occasionally found in the heart, liver, spleen, and other organs. While the hydatid mole is formed from the abnormal development of the villi of the chorion, the true hydatid acephalocyst is a sac in which the true echinococci are found. Can these latter agents be generated within the uterus? On this point there are few reliable observations. Our author quotes Rokitansky, who says:—

> "Cysts are very rarely formed in the uterus; we have not met with a single example in Vienna, and I myself have only inspected one case of uterine acephalocysts,"

and argues that this admission suffices to prove its possibility. Admitting this possibility, we still have, in the microscope, the means of distinguishing such a case from that of placental degeneration. J. D. T.

(*To be continued.*)

Correspondence.

DR. PETERS'S VINDICATION.

(*Concluded from page 190.*)

[To the Editor of the American Medical Times.]

Sir:—I have always wished to see printers' proofs of my letters to the profession and to you, but knowing full well how inconvenient it is to an editor to accord such a favor, I have refrained from asking it. But I wish your readers to know that in my first letter, page 109 of your Journal, second column, second line from top, the words "*in its form*" should read "*in its turn;*" and in my second letter, page 189, next to last line, the expression, "*prejudicial to the same practice,*" should have appeared "*prejudiced against the severe practice,*" &c.

I do not now, or at any other time, intend to object to the expression "Renunciation of Homœopathy," placed at the head of my first letter without consulting me; although it has been noticed by many that I was not then prepared to renounce the whole theory and practice of Homœopathy. Now I am prepared to renounce all of it except that which the regular profession has already, or may in the future adopt.

C. C. will have observed by this time that I was not a mere drug clerk when I entered upon the practice of my profession; also that I was not a mere Homœopathist; that my theories and experience had already led me to believe that there were errors and truths in both systems, and that I had common-sense notions about doses. In order to prove this more fully, I will add, that on my return to New York from Germany, in 1842 or '43, I soon began to make post-mortem examinations, in company with Dr. M. Goldsmith and others; also volunteered to act as clinical clerk under the late Dr. Swett of the New York Hospital; and finally, instigated by Drs. Goldsmith and Sayre, was active in founding the New York Pathological Society, which is still in honorable existence.

When the line of demarcation was strictly drawn between the two schools, and I was obliged to leave the Pathological Society, I had already accumulated, from the year 1840 to '47 inclusive, and published in a series of articles called "Gleanings," several hundred instances of apparently Homœopathic treatment from the best dominant school authorities; some of them were seemingly so positive that I dared not ignore them, neither could I explain them away. It was these that held me to Homœopathy, when many of its own errors and absurdities would have driven me away.

I was still young and comparatively inexperienced (for I had been in Germany less than one year) when I was thrown into a large practice; I was compassed about by angry and contending physicians and systems; was oppressed by opposing facts and factions; was forced into paths which I did not choose; obliged to take up heavy responsibilities which I would gladly have shrunk from, and I was driven on an appointed course by a strange combination of circumstances over which I had no control, and by the unwise action of sects and parties, almost with the inflexibility of fate, or the imperative operations of a special providence.

I am now prepared to prove that almost every apparently homœopathic cure can be explained away, and that the ordinary laws which have regulated the real practice of medicine in all ages will hold true, even in cases in which the resemblance between the drug-action and the disease-action may seem so close as to appear identical. The following example will give the clue, which every one can apply to all other puzzling cases. According to *Symonds*, "the evacuations produced by the purgative which cures a diarrhœa are *very different* from those which constituted the latter, and argue a *dissimilarity* in the state of the membranes that furnished them; and the inflammation produced in the eye by nitrate of silver must always be *different* (although not apparently so) in character from the inflammation which it is so frequently useful in removing." Constipation may be cured *antagonistically* by medicines which induce constipation: thus, a common cause of this condition of the bowels is a relaxed, dilated, and enfeebled condition of the colon, &c., which iron and alum, or even lead or lime, may remove by causing a contraction of the organs; again, nux vomica, which causes constipation by bringing about a tonic contraction of the greater intestines, may cure *antipathically* a costiveness depending upon a sub-paralytic state; and, finally, opium, which causes constipation by benumbing the muscular fibres of the large bowels and suspending the secretions of these organs, may cure costiveness arising from excessive contraction or spasm.

Both **Contraria** and **Timon** repeatedly misstate my position about *infinitesimal doses.* The theory which I adopted in the earliest part of my medical career, was, and is, that so called homœopathic remedies, cured, if they cured at all, by acting somewhat similar to, yet *absolutely different* from the diseases they removed, and hence by exerting an *alterative* action; and that the doses necessarily must be large enough to bring about such a change. Therefore, I was early and inflexibly opposed to infinitesimal doses, and never used them except in trivial, but sufficiently decided cases to make a trial. Even Andral tried as high as the twenty-fourth dilution in the experiments he made, and I have rarely or never gone beyond the third or sixth. It was only in the beginning of my career that I would have used them at all, and I most distinctly stated in my first letter that I have never been "beaten back to them." I have not used them for many years, and never intend to try them again; I have seen enough of the trials of others. To prove incontestably that it is impossible for me ever to return to their use, I add a short note, published by me, in the *American Journal of Homœopathy,* for Nov. 1856, p. 261.

"Sugar of milk (which the homœopathists use in the preparation of their triturated dilutions) is obtained from cow's milk, which, when fresh, always has an alkaline reaction, owing to the quantity of inorganic salts it contains. These salts consist of the phosphates of lime, magnesia, iron, soda, and the muriates of potash and soda; while carbonate of lime and sulphate of potash have also been discovered. There we have a goodly host of drug substances, always to be found in cow's milk; but justice obliges me to add that not all of them are to be discovered again in sugar of milk. Still, this apparently inert substance contains carbonates, sulphates, and phosphates of lime and potash; for Lagrange and Vogel found 47 parts in 1000 of these salts in *ordinary* sugar of milk; and Simon, 13 parts of 1000 in *very pure* sugar of milk. Hence 100 grains of the first trituration of lycopodium carbo vegetabilis, or silex, or any other equally inert substance contain only one grain of either of these so-called medicines, and at least $1\frac{3}{10}$ grain of lime of potash, and perhaps as much as $4\frac{7}{10}$ grains. In the second dilution of lycopodium, carbo, or silex, there will be only $\frac{1}{10000}$th part of a grain of these medicines, and of course at least $1\frac{3}{10}$ grain, and perhaps $4\frac{7}{10}$ grains of lime and potash, *i. e.* 13,000 times more of lime and potash, and perhaps 47,000 times, than of supposed homœopathic medicine. In the third dilution there will be 1,300,000 times and perhaps 4,700,000 as much. Hence if any cures follow the use of the high dilution triturations they must always have been caused by potash and lime, which must be regarded as the panaceas of the high dilutionists."

Both Timon and Contraria grossly misstate the position which I have always maintained towards the regular profession. They recklessly assert that I have been slandering and reviling scientific and rational medicine persistently for years. While I conducted the American Journal of Homœopathy, the following conditions were placed on every prospectus upon its covers: "Every endeavor will be made to make the Journal cosmopolitan; liberal and fair towards every shade of scientific opinion; entirely independent of, and above all factions, cliques, and mere private interests; Hahnemannian homœopathy, progressive homœopathy, and allopathy will be honorably and fairly represented—*never misrepresented.*" And as far as I was concerned these rules were honestly and manfully carried out, often to my own detriment. Some of the consequences of my persistent attempts to defend regular medicine in the pages of that journal, may be inferred from the following lines:—

St. John's, N.B., Oct. 26, 1859.

True, I afterwards wrote about fifty letters to so many different medical brethren, to ask their advice whether I could consistently remain as editor of a journal, which in my opinion deviated so widely from the name it professed (but not from the principles of its prospectus, repeatedly agreed to by all its editors); and true, I joined with Marcy in attempting by the answers I received from these letters to convince Radde that the interests of the journal and of homœopathy required that rational eclecticism should be kept out of its pages, even if it was necessary to request you to resign your connexion with it. There surely was nothing underhanded about this, and I should not have blamed you for doing the same thing. I shall always cheerfully bear testimony to your talents, scientific acquirements, and indefatigable industry, while I sincerely regret that we cannot more exactly harmonize in our views of what the cause of pure homœopathy requires of us. I see no cause why I may not with sincerity subscribe myself yours truly and fraternally,

Henry C. Preston.

Before parting with **Timon**, I wish to recall his attention to his malicious slur towards me while alluding to the name of Dr. J. S. C., and to present him the following notes:—

Sept. 17, 1861.

Dr. J. C. Peters.

My dear Sir:—The allusion in the **Medical Times** in reference to Dr. C. is certainly very unjust to you. I hereby cheerfully bear my testimony to your uniform kindness to him.

I remain, my dear sir, very truly yours,

Theodore Vietor,
93 Pearl Street.

88 Clinton Street, Brooklyn, Sept. 20, 1861.

Dr. Peters.

My dear Sir:—I was intimately acquainted with Dr. C. from his early boyhood up to the time when, under the influence of sickness, he abandoned his family. When his health required voyages to Europe and the West Indies, I had sole charge of his business matters; when he gave up his practice to Dr. McVickar and yourself, it was I who received from each of you, Dr. C.'s dues. In addition I acted as your bookkeeper, and know your faithful performance of his contract with you. When his health failed, you and other physicians, but you especially, were devoted and untiring in your exertions. Especially do I remember your patient services, when the convenience of your whole household was sacrificed to his comfort and welfare; and this at a period of his illness when he was especially exacting.

Respectfully yours as of yore

R. C. M.

DEAR SIR:—I have read the preceding, and can attest its truth, and I should be sorry indeed that you should suffer now for your kindness to the Doctor during his long and distressing sickness.

Gratefully yours,
A. M. C.

On account of an equally ungrounded assertion about Appleton's Cyclopædia, I call Timon's attention to the following note:—

OFFICE OF THE NEW AM. CYCLOPÆDIA,
39 Walker Street, 1861.

DEAR SIR:—I have seen a note attached to an article in the MEDICAL TIMES, making certain statements with regard to the article Homœopathy in the New American Cyclopædia. The author of that note is mistaken in some of his allegations. The late Dr. C. prepared an article on the subject at my request; but I found it too dogmatic, and in some respects too abstract and metaphysical for our purpose. The writer of the note states that the article was rejected by the advice or interference of homœopathic physicians. This is totally unfounded. I consulted no physician on the subject, nor took the advice of any person except my associate on the conduct of the Cyclopædia. I will add that, apart from the unsuitable characteristics I have named, the article of Dr. C. perfectly accorded in its drift and spirit with the one finally published in Vol. ix. of our work.

I remain yours faithfully,
To Dr. J. C. Peters. C. A. DANA.

In conclusion, I will simply express the hope that, in a future, and I hope no very distant time, all exclusive systems of medicine will be regarded in the same light as universal panaceas for all the ills which flesh is heir to justly are. The latter are the follies of ignorant men or quacks; the former are often the mistakes of otherwise learned, but too enthusiastic and ambitious men.

I now no longer dispense medicines from my office, or from pocket-cases; but write prescriptions invariably.

I think my renunciation has been in the newspapers quite enough even to satisfy Contraria.

I now, for the first time, can subscribe without the slightest mental reservation to the simple but stringent code of the American Medical Association.

J. C. PETERS, M.D.

Sept. 26, 1861.

A NEW METHOD OF TREATING DRY LABORS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I am induced to offer the following consideration to the profession, on account of the success attending the practice, as well as the favorable opinion of some of the leading members in the profession of your city, with whom I have conversed on the subject. They have very kindly urged me to communicate my *simple* and *practical method of preparing pregnant females for the operation of turning of the fœtus in utero*, in the highly annoying and dangerous cases of dry birth, with irritation, great sensibility and contraction of the uterus over the fœtus, in shoulder or other mal-presentations.

It will be admitted by those who have had a full share of experience in the treatment of difficult labors, that on many occasions we have to *encounter the greatest difficulty in effecting the introduction of the hand into the uterus to the required distance for reaching the feet*, for the performance of the operation of turning. Churchill, in his chapter on podalic version, corroborates this statement:—"On the other hand its disadvantages are not to be overlooked. From the *distance the head has to traverse, and the difficulty of seizing the feet*, and of turning the child in utero, there must ever be a fearful risk of injury to the mother." Upon an inspection of the tabular views given by Lee, we find that out of seventy-one cases of shoulder presentations, in which turning by the feet was resorted to, "seven women died from *rupture*, and three from *inflammation* of the uterus." "*Laceration* and *inflammation* of the uterus are, therefore, the consequences chiefly to be dreaded."

The *reaching of the feet* is usually deemed a difficult step in the operation, owing to the *contraction* of the uterus over the fœtus, while the *irritability* and *dryness* of this organ impede and endanger the act of turning itself. To mitigate the perilous consequences of the just-named artificial interference, I have adopted the following plan, viz. Previous to turning, I place the patient on her back, side, or on her elbows and knees, as the case suggests, the better to enable me to introduce into the os tincæ two or three fingers to reach the child; with these I endeavor to carry between the head and shoulder of the fœtus, if it is a shoulder presentation (or near any other convenient part, according to the mal-position), a large elastic catheter, whose orifice and pointed end is filled to the length of one inch with clean lard, which is kept at a low temperature; the mouthpiece of the catheter being attached to an elastic tubing connected with a stop-cock, and an elastic Davidson, or other forcing pump. Before connecting the catheter with the pump, I fill the catheter with sweet oil, at blood temperature, and lock the cock to keep the air out. I endeavor now to introduce the catheter, as heretofore remarked, as high up as practicable, into the cavity of the uterus; better, if feasible, between the ovum and the inner walls of the uterus, but *always opposite to the attachment of the placenta.* Having reached with the point of the catheter the required height, I connect the catheter with the pump, filled with oil at the above-mentioned temperature, the free end of the pump being immersed in a vessel containing oil kept at the same temperature. Now, I inject with a small degree of force, in the interval of pains, from one pint to a quart or more of oil. Between the injections I direct the patient to change her position from back to side, or elbow and knees, or vice versa, even to sitting or walking. On one occasion, where I could not procure oil, I used the white of eggs. From this simple operation, I have noticed the most pleasant results, namely: I have seen patients who were for twenty-four and more hours in intense suffering, in a comparatively short time calming down, with contractions of the uterus less annoying, the uterus becoming more pliable to the introduction of the hand, for the operation of turning. Now there was no great difficulty experienced, and the employment of force was not required. Nay, I succeeded, even after such a preparation, in changing a mal-position into a normal position, by the combined method of internal and external manipulation, *without introducing the hand into the cavity of the uterus.*

Cases of some interest, in connexion with this mode of preparing for turning, I shall report in my fasciculus on operative and therapeutic midwifery. The patients so treated had less symptoms of nervous shock, and showed far less the consequences of the dreaded operation, consequently the recovery was more speedy. Possibly a more extensive trial by other surgeons of this mode of preparing the patients for turning, may confirm my experience so far in the treatment of these annoying and obstinate cases, the result of which I would thankfully receive from any gentleman who would inform me.

Yours, etc.,
J. LANGER, M.D.,
Of Davenport, Iowa.

P. S.—Should professional gentlemen have a case, during my short sojourn in New York, where the above method is indicated, I would request them to address me at No. 404 West 23d street.

NEW YORK, Sept. 24th, 1861.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

Sept. 30, 1861.

A NICE little breeze has stirred the foliage in our medical groves, and awakened the branches to a temporary life, but it has passed, and we have relapsed into our wonted quietude.

I presume ere this, you have heard that in consequence of serious illness, Dr. Wm. V. Keating, lately elected Professor of Obstetrics in the Jefferson Medical College, has tendered his resignation. Shortly after his election, Dr. K. had a severe attack of some cerebral affection, simulating apoplexy; he rested awhile, and then renewed his devotion to his profession, but being again attacked, and finding his health failing, he determined to try the effect of a visit to Europe. It was anticipated when he departed, that he would be sufficiently restored to return early in the fall and discharge the duties of his chair the coming session, but, in consequence of combined feebleness, and a renewal of alarming symptoms, by the advice of his medical attendant, he remained abroad, and his resignation from the chair was made known in our city about one month ago. As it was believed that he would not again attempt to lecture, a delightful excitement sprang up, and an amiable rivalry was manifested by a host of gentlemen who were desirous of teaching the young medical idea how to "take the responsibility," or in other words, to announce the birth of a son or daughter *secundum artem*.

Boring for a professorship, like all other similar efforts, *occasionally* causes disappointment in a few, by their meeting with "a fault." Nor was the present an exception to the general rule. In fact, it was an exception, by reason of a most unlooked for result. Amid the host of candidates for professional honors, four were regarded as positively those specially favored; but what must have been the horror of these gentlemen and their friends when it was announced that Dr. C. D. Meigs had been prevailed upon to come forth from that retirement for which he had so long hoped and waited, the resignation of Prof. Keating had been withdrawn, and the lectures would go on as usual by Dr. Meigs. As the latter gentleman has for some years been in feeble health, and has had but little opportunity to recruit since the fatigues of last winter, it is more than probable that he will require all his energy to carry his course through, and —but we shall see what we shall see. As events progress, I shall keep the Times posted.

The clinics have already commenced, and there is a very fair sprinkling of students on the benches. Professors are hopeful, keepers of student boarding-houses are anxious, and the profession look on with indifference.

With September the societies resume their meetings, and already the Philadelphia Co. Society has had a *conversazione*, at which Brunonianism was again ventilated, Dr., late Professor Hartshorne, opening with a paper. As it was a wretched evening, raining hard and blowing, the members did not turn out in large numbers, though, by those who were present, it was thought the discussion was as spirited as could be desired, and a promise of many brilliant reunions for the season.

The College of Physicians are still working at their new hall, *on paper*; and it is thought a continuation of their herculean labors will eventually result in something. A place of meeting for all of our societies is eminently desirable, but I fear it may be long ere our eyes behold the sight. *Apropos*, I suggest that some one of the associations take the building lately occupied by the Pennsylvania Medical College, and transform it into a hall for medical purposes. With some few alterations, it could be readily fitted for meetings, museums, committee rooms, library, &c. But though a library, accessible at reasonable hours, and to all regular members of the profession, is a great desideratum, it would appear that it is an impossibility. Some years ago the idea was started, subscriptions obtained, and then the affair subsided. The money was never called in, and from some trifling obstacle, the movers in the matter suffered it to fall through.

The health of the city is excellent. The bill of mortality is rapidly coming down to the minimum point; once more the slaughter of the innocents is stayed, and cholera infantum ceases to swell the weekly list of victims. As the cool weather advances chills make their appearance, and we have the usual tendency to the intermittent type of disease.

The appointment, among others, of Drs. G. B. Wood, S. D. Gross, Robley Dunglison, and Wilson Jewett, as associate members of the U. S. Sanitary Commission, gives universal satisfaction. The government have wisely selected four of our best medical men for this important duty, and valuable results may be anticipated from their co-operation.

Yours, &c.,

A. M. Leon, M.D.

Army Medical Intelligence.

Brigade Surgeons.—The following is a complete list of Brigade Surgeons with the commands to which they are attached:—Geo. H. Lyman, F. J. Porter's Division; Frank H. Hamilton, Gen. McClellan; Henry S. Hewitt, C. F. Smith, Paducah; J. H. Brinton, Surgeon Simons, Cairo; John A. Lidell, Baker's Brigade; John C. Dalton, jr., Gen. McClellan; Geo. Suckley, New Jersey Brigade; Henry Bryant, Gen. Lander's Brigade; P. W. Ellsworth, Gen. McClellan; Luther V. Bell, Gen. Hooker's Brigade; S. W. Gross, Gen. Anderson; David Prince, Gen. Graham's Brigade; A. H. Hoff, Gen. Fremont; W. H. Church, Gen. Burnside; Joseph W. Freer, Gen. McClellan; Rufus H. Gilbert, Gen. Wool; J. J. Lindon, Gen. Hunter; Chas. McMilan, Gen. Heintzleman's Brigade; Chas. O'Leary, Gen. Couch's Brigade; J. G. F. Holston, Gen. Blenker's Brigade; A. B. Campbell, Gen. Hunter; A. V. Z. Blaney, Medical Purveyor in Illinois, under Hunter; Thomas Sim, Sickles's Brigade; J. S. Bobbe, Report to Indianapolis, Ind.; Peter Pineo, Wadsworth's Brigade; William J. Waters, F. J. Porter's Division; Oramel Martin, Gen. Hunter; J. H. Ranch, Gen. Keyes's Brigade; Wm. B. Stewart, Gen. A. Porter; N. R. Derby, Gen. Hunter; Daniel McRuen, Gen. McClellan; S. R. Haven, Gen. Smith's Brigade; A. J. Stocken, Gen. McCall's Division; J. Owen, Gen. Richardson's Brigade; W. C. Thompson, Gen. Barry, Chief of Artillery; James King, Gen. McCall's Brigade; T. Rush Spencer, Gen. Peck's Brigade; J. D. Robinson, Gen. Rosecrans; Geo. G. Shumard, Gen. Benham's; William C. Strew, Gen. Anderson; D. W. Hartshorn, Gen. Fremont; Thos. H. Bache, Gen. Wool; A. P. Weybert, Gen. Anderson; Edwin Butters, Gen. McClellan; Robert L. Stanford, Gen. Fremont; James D. Strawbridge, Gen. Rosecrans; John T. Carpenter, Gen. Rosecrans; O. M. Bryan, Gen. Fremont; F. Noel Burke, Gen. Fremont; S. L. Herrick, Gen. Slocum's Brigade; A. B. Crosby, Gen. Storr's Brigade; B. B. McCoy, Gen. Wool; William Varian, Gen. Fremont; Josiah Curtis, Gen. Wool; John J. Craven, Gen. McClellan; F. A. Perkins, Gen. Rosecrans; G. C. Blackman, Gen. Mitchell; R. F. Boutecou, Gen. Wool; Samuel Everett, Gen. Fremont; J. H. Warren, Gen. McClellan; William Brodie, Gen. Fremont; D. W. Bliss, Gen. McClellan; H. P. Stearns, Gen. Fremont; G. W. Hipp; G. H. Oliver, Gen. Rosecrans; Alexander N. Dougherty; J. C. Franklin; Geo. S. Kimble; Geo. H. Hubbard; J. B. S. Todd; D. W. Hand; Rufus H. Brown; W. G. Lowman.

Medical Cadets.—The following Medical Cadets have been appointed under section 5, chapter 88, of Acts of First Session of the Thirty-seventh Congress. Five more are yet to be appointed:—Geo. V. R. Merrill, Sergeant 23d N. Y. Volunteers; W. H Gardner, Washington; M. R. Moxley, Columbian Hospital; Edward Curtis, New York; C. P. Wilson, Cincinnati; James S. Drake, 6th Pennsylvania Regiment; Rufus Delafield, 16th N. Y. Volunteers; T. G. H. Bradford, Portland, Maine; Norton Folsom, Cambridge, Mass.; Horatio Paine, 16th N. Y. Volunteers; Samuel L. Fitch, Delhi, N. Y.; John H. Lyman, Pulaski, N. Y.; Lewis H. Bodman, E Street Hospital, Washington; Edward Storrow, New York; Edward Hutchinson, 14th N. Y. Volunteers; Charles H. Deverdorf, Amsterdam, N. Y.; George H. Hopkins, Washington; William H. Eahelberger, Eugene, Verm'n Co., Indiana; W. A. Anderson, Portland, Me.; James S. Gregory, Brooklyn, N. Y.; Thomas Francis, Washington; Edward R. Hutchins, Massachusetts; Chas. Lester, Washington; John Sullivan, New Hampshire; R. A. Stephenson, Washington; A. T. Pick, Baltimore; S. G. Minossian, Lowell, Mass.; Charles W. Spayd, Philadelphia; John W. Allen, Carlisle, Penn.; Charles H. Dougall, Milton, Penn.; M. A. Davis, Lansingburg, N. Y.; Jacob Roberts, Harrisville, N. J.; Walter D. F. Day, New York; Henry A. Robbins, Washington; Charles A. Milton, 3d New Hampshire Volunteers; Regin P. Davis, Clarksburgh, Va.; Harvy Gray, 1st Massachusetts Volunteers; Abijah Light, Lebanon, Penn.; Lewis Applegate, New York; Samuel Weil, New York; William Longshaw, jr., East Cambridge, Mass.; F. A. Dudley, New Haven, Conn; S. G. Gray, Columbia, Lancaster Co., Penn.; J. M. Pillsbury, 14th Massachusetts Vols.; F. LeMoyne, 12th Penn. Reserve Corps.

Surgeon to the 12th Regiment, N. Y. Vols.—Prof. A. B. Shipman, of Syracuse, N. Y., has been transferred from the surgical staff of the 17th Regiment of N. Y. Vols., to the surgeoncy of the 12th Regiment N. Y. Vols.

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EXPERIENCES IN CAMP.

[Army Correspondence of the American Medical Times.]

18th Mass. Reg. in Camp near Fort Corcoran,
Arlington Heights, *Sept.* 20 1861.

I send you some remarks upon those subjects which, in an experience of two camps, have been most patent to my observation. I would remark, *in limine*, that the constant interruptions and annoyances of camp life render anything like careful systematic writing entirely out of the question. Having experienced several very severe rain storms, both in New England and since we came here, the absence of severe disease among the men under my charge has led me to consider carefully whether they were not healthier than they were at home carefully housed and protected from the elements. Now, day before yesterday, we were reviewed by Gen. McClellan. Just before his arrival a tremendous shower wet us all to the skin, or, as the Spanish say, to the marrow. So great was the fall of rain that the men stood and marched for the next hour ankle deep in water. What was the result when many of them slept in their wet clothing in spite of all that could be done to prevent it? My next morning's return showed that of a force of 850 men only 30 were on the sick list, and on this, the second morning, only 27 were on the list. When we remember that nearly all these men have had comfortable homes, and have been entirely unaccustomed to exposure, does it not seem that we have heretofore overestimated its effect in the production of disease? A very severe and cold rain storm, which we experienced while in camp at Readville, Dedham, Mass., and which continued with great severity for forty-eight hours, had a like trifling effect upon the health of the men. Provide an abundance of straw for the men, so that they may not lie directly upon the damp ground, and insure their having a dry towel to rub themselves with, and a dry suit to put on, and they may laugh at the worst storms.

While with Cobb's, now Nim's, company of light artillery, at Quincy, I saw a good many contused and a few lacerated wounds. In one case a gunner falling from his seat while the horses were at a gallop, and catching his foot in a trace, had the outer attachment of the soleus pretty much ground off from the tibia by the friction of the tire of the wheel against which it was pressed. Rest and cold water in the first instance, and careful bandaging afterwards, brought this large wound to cicatrization in about three weeks. A case of gun-shot wound occurring outside of my military supervision may be interesting. I was desired to see the case by Dr. Woodward of Quincy, who is emphatically *the* physician of the place, where he has been for forty years. Eight weeks previously the young man had received a pistol-ball into the palmar surface of the forearm. The ball could not be detected, and Dr. W. advised letting it remain. Other advice prevailed, however, and very extensive incisions were made through the muscles of the forearm without finding the bullet. Finally, for some reason, while the young man was under treatment at some distance from home, the forearm was amputated just below the elbow. This was done about one fortnight after the accident. When I saw him I found him very prostrate, with several bedsores, and with evident fluctuation about the shoulder, accompanied by much œdematous puffing up of the arm. An incision of considerable length near the acromion process gave exit to an immense amount of fœtid pus, which, judging from its condition, must have been there for quite a length of time. From this time the boy slowly recovered. I have omitted to state the boy told me that after amputation the bullet was found in the palm of the hand just between the roots of the middle and ring-fingers. Why was amputation required in this case, and what connexion had the abscess with the accident, incisions, and probings, and amputation? All that we could ascertain from the lad was, that the arm was cut off because it mortified. I will here mention a case of gun-shot wound which has recently occurred in this regiment. About a week since, private P———, on being relieved from guard duty, forgot to remove the cap from his gun, and lay down with the butt by his shoulder and the muzzle down by his feet. In his dreams he saw Beauregard advancing at the head of the rebel army, mounted on a white horse, and pulled trigger on him with the effect of sending one ball and three buck-shot through his own left shoe and foot. On examination I found the extensor tendon of the great toe laid bare, and the metacarpal bones of all the lesser toes in their outer halves blown into atoms. The skin and muscular tissue on the anterior surface of and between these bones was destroyed, but the sole of the foot was comparatively uninjured. Notwithstanding fear of great sloughing, and also of secondary hæmorrhage, I contented myself with sawing through the metacarpal bones of the lesser toes at just about their middle, which removed all splintering, leaving the great toe, and preserving all of the sole for the flap, which was at best but scanty. Notwithstanding the muzzle of the gun was in direct contact with the foot, and the force of the explosion ripped the upper leather from the sole nearly all around, the parts thus contused have sloughed but very little. There has been no secondary hæmorrhage, the wound is rapidly closing, and the foot promises soon to be about as useful as ever. This I call conservative surgery.

The number of our men who were overcome by the heat and fatigue of the march to this encampment, from Washington, showed me very conclusively the great importance of a sufficient number of ambulances for the transportation of those who drop out from the ranks. The light, two-wheeled, one-horse variety are decidedly preferable to the heavier; still, one large four-wheeled one would be very convenient, used as a movable hospital. It could be so arranged as to furnish all hospital essentials at a moment's notice. It might carry upon its roof, under a tarpaulin, the hospital tents with their poles. Under the driver's and steward's seat should be placed the instrument trunks, with a spare harness. Directly behind the driver's seat, and directly accessible therefrom, could be two large medicine chests. The remainder of the vehicle could either be entirely occupied by bedsteads and stretchers, or by four bedsteads with occupants. A very little ingenuity could easily devise the best means of carrying rolled up awnings, which, the moment a halt was ordered, could be expanded on every side of the ambulance. I am convinced that such an ambulance, or rather flying hospital, could be constructed which would furnish means of transport for hospital tents, twenty beds and stretchers, instruments, medicines sufficient for a regiment for three months, awnings, and all the paraphernalia of a hospital, and too enable one to make use of them at a moment's notice, without exceeding a weight that could be easily drawn by four horses.

Things to be useful to a regiment, on the march or in the field, must be easily accessible, and means for the *immediate* shelter and care of the sick are very important.

David P. Smith,
Surgeon to the 18th Reg. Mass. Vols.

Medical News.

Railroad Damages.—A Congress of Directors recently held a meeting at London, to consider the propriety of obtaining a mitigation of the awards of juries in cases of railroad accidents. It was stated that one company disbursed last year, £80,000 for accidents on its line.

Cholera at Meerut.—This fatal epidemic is prevailing at Meerut. Many English residents have already fallen victims to it.

Two Deaths from Chloroform.—Two more deaths from this anæsthetic have recently occurred, one at Newcastle Infirmary, and the other at Cumberland Infirmary (Eng.). The patients were young men about to undergo a surgical operation. Artificial respiration and galvanism failed to restore them.

Surgeon Prisoners.—Drs. Alfred Powell and Wm. H. Wilson of the 2d Reg't, N.Y.S.M.; Wash. A. Connelly and And. McLetchie, of the 79th Reg't, N.Y.S.M.; R. A. Goodenough, 14th Reg't, N.Y.S.M.; James Harris, 2d R. I. Volunteers; C. W. Le Boutillier, 1st Reg't Minnesota Volunteers, have been released from Richmond on parole, and arrived at Washington on the 22d inst.

The British Museum possesses skins of 4,200 species of birds. The number of species described is about 8,300.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture II.

Recapitulation of the Subjects relating to Percussion considered in the preceding Lecture.—Exaggerated Vesicular Resonance in Emphysema and Tympanitic Resonance in Pneumo-hydrothorax again illustrated and contrasted.—The Application of Percussion to the Diagnosis of Emphysema.—Application of Percussion to the Diagnosis of Pneumo-hydrothorax.—Application to determine the Presence of Liquid in the Pleural Sac in Pneumo-hydrothorax, Pleurisy, Empyema, and Hydro-thorax.—Vesiculo-tympanitic Resonance over Lung floating on Liquid.—Percussion in Pneumonia, Œdema of the Lungs, Pulmonary Apoplexy, Carcinoma, etc.—Importance of the Negative Information obtained by Percussion in Bronchitis, Asthma, Intercostal Neuralgia, Pleurodynia, Affections of the Larynx, etc.

Gentlemen:—In my last lecture I pointed out the sources of the important differences by which different sounds are distinguished, viz. intensity, pitch, and quality. I endeavored to make clear the points of difference denoted by these three terms. I trust that I succeeded in so doing, for you will find that a complete and accurate knowledge of the physical signs obtained by percussion and auscultation, involves an appreciation of distinctive characters derived from these sources. Entering upon the consideration of percussion, we considered, as the point of departure for the study of the signs of disease obtained by this method, the signs pertaining to the healthy chest. We analysed the sound produced by striking upon the healthy chest, called the *normal vesicular resonance*, and we found it to be a low pitched sound, varying in intensity according to the force of the blow and other circumstances, and possessing a peculiar quality—a quality not to be described in words or imitated, but which the ear quickly learns to appreciate, and which we have called the vesicular quality. Bear in mind the fact implied in this name, viz. this peculiar quality of sound is due to the peculiar structure of the lungs by which the air giving rise to the resonance is contained in an immense number of minute spaces called the air vesicles. Next were considered the variations in different healthy persons, as regards the normal vesicular resonance, and the normal variations between the two sides of the chest. Proceeding, then, to the signs of disease, it was found that these are only five in number, to wit, exaggerated vesicular resonance, diminished resonance or dulness, absence of resonance or flatness, tympanitic and vesiculo-tympanitic resonance. Exaggerated vesicular resonance was stated to be an important sign in one affection only, viz. pulmonary or vesicular emphysema. This sign was illustrated in several patients affected with emphysema, who were introduced into the amphitheatre. Next, tympanitic resonance was illustrated by a case of pneumo-hydrothorax.

I shall now proceed to explain and illustrate further these five signs, as they are presented in different forms of disease, considering their differential characters, their significance, and their diagnostic value. Taking up, as I shall do in this course of lectures, the signs belonging to each of the different methods of exploration separately, I shall direct your attention to the signs belonging to the particular method under consideration, as they are presented in the cases which I shall bring before you. It is a striking and beautiful feature of physical exploration, that signs from the different methods are brought together in diagnosis. We do not rely upon signs obtained by percussion on any of the methods singly, but we employ in conjunction several or all the methods. In this way information obtained by any one method is corroborated by that furnished by other methods; and, on the other hand, incomplete or erroneous conclusions which might be drawn from the information obtained by a single method, are rendered complete or corrected by the combination of signs furnished by the different methods collectively. In the clinical study of the cases which we shall observe together during the session in this hospital, we shall bring to bear upon the diagnosis all the physical signs available, always considering them in connexion with the symptoms, for the latter are by no means to be overlooked in bestowing due attention on the former; but at present it would beget confusion to anticipate the subjects of future lectures by speaking of signs which have not been considered. As we proceed in our course, it will be useful to point out the correlation of the signs under consideration with those which have been considered, but it is obvious that to go in advance of the subjects under consideration would be embarrassing to the student.

I have illustrated exaggerated vesicular resonance and tympanitic resonance as these signs are presented in several cases of emphysema, and in a case of pneumo-hydrothorax. I wish now to consider more fully the application of these signs to the diagnosis of these two affections. I shall therefore again introduce one of the patients affected with emphysema, and the patient affected with pneumo-hydrothorax. I strike upon the chest of each of the two patients as they stand before you, and you have again an illustration of these two signs contrasted with each other. The essential difference consists, as you perceive, in the entire absence of the vesicular quality of sound in the case of pneumo-thorax, and in the presence of a certain amount of the vesicular quality of sound in the case of emphysema. I wish you to notice that in both cases the sound is intense; in both, in fact, there is exaggerated resonance, but in one case the resonance is purely tympanitic or non-vesicular, while in the other the vesicular quality is apparent. The vesicular quality, however, in the case of emphysema is not strongly marked; it is less marked than in health, and this is always true of the resonance in that affection. The vesicular quality of sound is uniformly lessened, and the pitch of the sound is raised in emphysema. In other words, the resonance is properly a vesiculo-tympanitic resonance.

To what extent is percussion applicable in the diagnosis of emphysema? Percussion alone, without any knowledge of the history or symptoms of a case, would very rarely, if ever, warrant a positive diagnosis. But, taking the information obtained by percussion in connexion with certain laws of the disease, viz. that it affects the upper lobes especially or exclusively; that it affects generally both sides, and that the lung on one side is usually affected to a greater extent than that on the other side; moreover, taking into view the history and symptoms, and bringing percussion to bear or the exclusion of other affections, the diagnosis could often be made with much confidence. We shall see, however, that other methods, viz. inspection and auscultation, furnish most important information, and of this information we should not, of course, fail to avail ourselves.

Here is an important fact to be kept in mind: An exaggerated vesicular resonance is one of the signs of emphysema, but emphysema does not invariably give rise to an exaggerated resonance. The amount of the emphysema, in some cases, prevents exaggeration of the resonance. When the increase in the volume of the lung is so great as to dilate and render extremely tense the thoracic walls, the sound is deadened precisely as the sound of a drum too strongly tightened is deadened. In such a case the resonance will be vesiculo-tympanitic, but not exaggerated. Such cases are exceptions to the rule.

Another point connected with percussion in emphysema is to be mentioned: Emphysema may be limited to one side, and, as I have stated, when it exists on both sides, as it usually does, it is generally greater on one side than on the other. Now, if we were to be guided alone by the information obtained by percussion, we might be liable to the error of supposing the exaggerated resonance, which is either limited to or greater on one side, to be the normal resonance proper to the person examined, and that diminished resonance or dulness exists on the other side. Due attention to other signs will prevent this error.

To what extent is percussion applicable in the diagnosis of pneumo-hydrothorax? A non-vesicular or tympanitic resonance existing on one side in a case in which the previous history and symptoms point to the occurrence of perforation of lung, renders the presumption strong that the pleural sac contains air. But the proof is not complete. A tympanitic resonance considerably intense is sometimes produced by percussing over solidified lung. In pneumo-hydrothorax, however, other signs are generally associated which are highly characteristic, and render the diagnosis positive. These signs are obtained by other methods, viz. auscultation and percussion, and will be considered when we come to treat of these methods. In this affection liquid and air are contained in the pleural sac. Pneumo-thorax, *i. e.* air without liquid, very rarely exists. Now, the fact that both liquid and air are contained in the pleural sac, is demonstrated by a mode of applying percussion which I will illustrate in the case before you; and this will lead us to speak of the signs of liquid which are obtained by percussion.

In the case of pneumo-hydrothorax before you, a certain portion of the pleural space is occupied with liquid, and another portion with air. The liquid gravitates, of course, to the bottom of the chest, and rises to a certain height. The air, of course, is above the liquid, and the pressure of the air and liquid combined, condenses the lung, and carries it upwards into the superior posterior portion of the chest. I now percuss on the anterior surface of the affected side from above downwards. The intense tympanitic resonance continues until I come to a point about on a level with the nipple; here the resonance ceases, and below this point we have absence of resonance or flatness extending to the base of the chest. This flatness denotes the presence of liquid. What is the evidence of this? The patient is now standing; the body is in a vertical position. The point, where the tympanitic resonance ceases, is not far from the level of the liquid. Percussing from above downwards around the chest, marking with ink the points where the tympanitic resonance ceases, and then connecting together the points, you see I make a horizontal line around the affected side of the chest. This may be considered as representing the level of the liquid. I now change the position of the patient by causing him to lie on his back on the table before me. In this position the liquid in the chest should change its level; it should gravitate to the posterior part of the chest, and the air above should extend anteriorly from the summit to the base of the chest. Let us see if percussion shows this to be so. I percuss now from above downwards, and, as you perceive, an intense tympanitic resonance is obtained everywhere over the anterior surface of the affected side. I now cause the patient to rise, and again take the standing posture. Repeating the percussion, the tympanitic resonance now extends from the summit only to the horizontal line which I have previously delineated on the chest in ink.

By this procedure we have demonstrative proof of the presence of liquid with air in this case. But it does not show with exactitude the relative spaces occupied by the air and liquid. The horizontal line of flatness when the patient stands is not precisely at the surface of the liquid, for the tympanitic resonance is propagated somewhat below the surface. This is a fact to be borne in mind. If the quantity of liquid be small, we may not obtain evidence of its presence by percussion, because the tympanitic resonance is propagated over the whole of the affected side. If, however, the quantity be considerable, this test is available.

I pass to speak of the application of percussion to determine the existence of liquid in the pleural sac, in other affections than pneumo-hydrothorax. Liquid exists in this situation in pleurisy, in empyema, which is only a variety of pleurisy, and in hydrothorax. I shall introduce two patients affected with pleurisy. In one of these patients the right side of the chest is nearly filled with liquid. What is the evidence of this? I percuss the chest. On the left side we have everywhere the normal vesicular resonance, and on the affected side we have everywhere absence of resonance or flatness. Is this flatness proof positive that the side is filled with liquid? It is not; yet it is very strong evidence, for the probability is extremely slight that the whole of one lung is solidified sufficiently to give rise to this universal flatness on one side, in a patient with a chronic affection and able to be up and about, as is this patient. Indeed, it is rare that solidification of an entire lung is so complete as to yield no sound on percussion; usually there is air enough in the bronchial tubes and in some of the air cells to permit some resonance, which is either tympanitic or vesiculo-tympanitic. Still, such a condition is possible, and there might possibly be a tumor filling the whole of the affected side. Therefore, to arrive at a positive diagnosis, other signs are to be obtained by auscultation, inspection, and palpation, which will be considered in treating of these methods.

In the other patient the affected side is not filled with liquid. About two-thirds of the left side are occupied with liquid, and the lung is expanded to occupy the remaining space. Now in this case the same procedure may be employed to determine the presence of liquid, as in the case of pneumo-hydrothorax. As the patient stands I percuss from above downwards, until the vesicular resonance ceases, and gives place to flatness. The upper limit of the flatness denotes the level of the liquid. It denotes the level of the liquid more accurately than the upper limit of flatness in the case of pneumo-hydrothorax, for a vesicular resonance is not propagated below the level of the liquid like the tympanitic resonance; at all events, not nearly to the same extent. The vesicular resonance is due to the lung which floats upon the liquid. I now cause the patient to lie on his back. In this position the liquid gravitates to the posterior part of the chest, and the lung, still floating on the liquid, extends in front downwards. Percussing on the anterior surface, you perceive that the resonance extends several inches lower than when the body was in a vertical position. This test is available in certain cases of pleurisy, but not in all cases. Of course it is not available when the pleural sac is filled. It is not, also, when pleuritic adhesions have taken place, so as to prevent the lung and liquid from obeying the law of gravitation. It is available in the larger proportion of the cases of pleurisy, in which the affected side is not filled with liquid. It is almost always available in hydrothorax.

There is an interesting fact connected with the percussion sound over the lung of the affected side, when the side is partially filled with liquid, which I will illustrate in the case before you. I percuss at the upper part of the chest, in front, on the affected side, and compare the sound with that produced by percussing on the healthy side in a corresponding situation. You perceive that the sounds on the two sides differ. On the affected side the resonance is more intense than on the healthy side. It differs also in character; it is less vesicular and higher in pitch on the affected side. The resonance on this side, in fact, is vesiculo-tympanitic. This is the rule under these physical conditions. The resonance over the lung in the side of the chest partially filled with liquid, is usually more intense than in health, and it is always vesiculo-tympanitic in character. The explanation of this fact has given rise, of late, to considerable discussion. I confess my inability to offer a satisfactory explanation, and I shall therefore content myself with simply stating the fact as one determined by clinical observation.[*] You see, at once, how this intense vesiculo-tympanitic resonance above the level of the liquid, might lead to the error of supposing that pneumo-hydrothorax existed, provided percussion alone were relied upon, and careful attention were not given to the quality of the resonance. The resonance does not lose altogether the vesicular quality; the latter is only diminished. But in pneumo-hydrothorax the resonance above the level of the liquid is purely tympanitic; the vesicular quality is lost.

I shall now direct your attention to the signs, obtained by percussion, which denote solidification of lung as occurring in pneumonia. It is not convenient to bring patients affected with pneumonia into the amphitheatre, but abundant opportunities will be presented for illustrating in the hospital wards the points of which I shall speak.[†] In the second stage of pneumonia, over the portion of lung solidified, we have generally notable dulness, sometimes flatness, and in some instances a tympanitic resonance which may be considerably intense. If the solidification be complete, *i. e.* all the air cells within a certain portion of lung filled with exudation matter, whatever sound may be elicited by percussion must necessarily be tympanitic; it cannot have any vesicular quality. Whatever resonance emanates from the lung under these circumstances can only come from air in the bronchial tubes. The sound is generally feeble, and we have tympanitic dulness. But in some cases, especially when an upper lobe is solidified, we obtain a considerable amount of tympanitic resonance. The sonorousness will sometimes be found to vary at different periods of the day, according as the bronchial tubes are free or filled with morbid products. It is to be remarked, in passing, that a tympanitic resonance obtained by percussing the lower part of the chest is sometimes transmitted, on the left side from the stomach, when this organ is distended with gas, and, on the right side, from a similar condition of the transverse colon. This may occur when the lungs are free from disease, but the sound is more readily transmitted if the lower lobe be solidified.

It follows from what has been said with regard to the sounds obtained by percussing over solidified lung in pneumonia, that these sounds are not in themselves adequate to the diagnosis. The sounds may be dull, or flat, or tympanitic, neither being distinctive of solidified lung. Signs obtained by other methods are to be brought into requisition, and especially auscultatory signs. The combination of these with the information obtained by percussion, suffices for the diagnosis. If, however, we are obliged to limit ourselves to percussion, we might often arrive at a diagnosis by ascertaining the space over which the dulness or flatness extends, and taking into view certain well-known laws of pneumonia. Pneumonia, when primary, extends generally over an entire lobe, and the lower lobe is first invaded in a vast majority of cases. Now, let me delineate on the chest the relative situations of the upper and lower lobes. Commencing at the spinal column, at a point on a level with the spinous ridge of the scapula, I draw a line with ink, obliquely downwards and forwards, to the space between the fourth and fifth costal cartilages on the left side, and to a point a little lower on the right side. This line represents, with sufficient correctness for practical purposes, the situation of the interlobar fissures, or the divisions between the upper and lower lobes. The middle lobe, on the right side, is, in fact, only a piece of the upper lobe. It is important to recollect the relative positions of the lobes. You see that the greater part of the lower lobe is situated behind. This should have been called the posterior, and the upper the anterior lobe. Bearing in mind that pneumonia, in the vast majority of cases, invades first the lower lobe, you see that we are to seek for the physical signs of this disease mainly on the posterior surface of the chest. Forgetting the relations of the lobes, practitioners are sometimes content to examine the chest in front for the evidence of pneumonia. Another point relating to anatomy suggests itself in this connexion. The right lung is shorter than its fellow. The liver presses the diaphragm upwards, rising to the seventh and sometimes to the sixth rib on a vertical line through the nipple, the height varying in different healthy persons. Over the liver, of course, we have flatness on percussion. Forgetting the height to which the liver extends, practitioners sometimes consider the hepatic flatness as evidence of intra-thoracic disease. I have had my attention called to the flatness produced by percussing over the liver, as evidence of liquid or solidification of lung, in not a few instances.

To return from this digression to the application of percussion to determine, by this method alone, the existence of pneumonia. Suppose in a patient affected with some acute disease, we find dulness or flatness, extending over a space on one side of the chest, corresponding to that occupied by the lower lobe. We ascertain the boundary line between the vesicular resonance and dulness. We delineate this line on the chest with ink, and we perceive that it pursues an oblique course across the chest coincident with the interlobar fissure. We find that the relations of the dulness or flatness, and the vesicular resonance, are not changed by altering the position of the patient, remaining the same when he is sitting or standing, as when he is recumbent. Having ascertained these facts, we may conclude with much positiveness that pneumonia exists. This procedure does not possess very great practical importance, because, by means of percussion and auscultation, the diagnosis of pneumonia presents little or no difficulty. Still, it is worthy of being considered and remembered.

But other affections than pneumonia occasion solidification of lung. Of these, the most frequent and important is tuberculosis. I shall speak of the application of percussion to the diagnosis of tuberculous disease at some length. Irrespective of this affection, solidifidation, more or less complete and extensive, occurs in œdema of lung, in pulmonary apoplexy, in gangrene, and in carcinoma. A solid mass also displaces space which should be occupied by spongy lung in aneurismal or other tumors within the chest. In all these affections, dulness and flatness on percussion are important signs. Percussion alone, in these affections, is not sufficient for the diagnosis. Other methods are to be employed, and in conjunction with the signs obtained from all the methods, symptoms, and the laws of these several affections, are to be considered. The information obtained by percussion is highly important as furnishing evidence of the physical condition, its situation, and its extent; and this evidence, conjoined with that derived from other sources, leads to a knowledge of the pathological condition, or, in other words, the character of the affection.

Before I proceed to consider percussion in tuberculosis, I will speak of its value as furnishing negative information in several affections. There are certain pulmonary affections which do not give rise to physical changes represented by any of the signs obtained by percussion. This is true of bronchitis, both in the ordinary form of this disease and in the rarer and much more dangerous variety called capillary bronchitis. The normal vesicular resonance continues in pure bronchitis, because the air vesicles are unaffected. Now, the symptoms in ordinary and capillary bronchitis would often lead us to suspect that other affections existed, such as pneumonia, pleurisy with effusion and tuberculosis. But these affections do give rise to physical changes which are represented by signs obtained by percussion. Finding these signs wanting, therefore, we are able to exclude the affections. We reach the conclusion that bronchitis only exists, thus, reasoning by way of exclusion as it is called. This is a most important application of percussion. Absence of dulness or flatness, in other words, the presence of the normal signs on percussion, is a fundamental point in the diagnosis of bronchitis. I shall often have occasion to illustrate this fact in our clinical studies during the session.

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[*] In the wards of the Hospital, on the same day that this lecture was given, the fact was illustrated, that in cases of pneumonia affecting the lower lobe, the resonance over the upper lobe on the same side is usually more intense than on the opposite side, and vesiculo-tympanitic in character. The statement of this fact was inadvertently omitted in speaking subsequently of the application of percussion to pneumonia in this lecture.

[†] The more important of the points were illustrated on the same day in a case of pneumonia affecting the lower and middle lobes of the right lung, and the organs were exhibited to the class, in a clinical lecture, in the amphitheatre, on the succeeding day.

Percussion is important, in a negative point of view, in the diagnosis of asthma, in affections of the larynx and trachea, and in cases in which foreign bodies have fallen into the air passages, showing that the symptoms are not due to any of the affections which give rise to signs obtained by this method; in other words, enabling us to exclude all those affections.

Another important application is in cases of intercostal neuralgia and of pleurodynia. These affections may give rise to pain which is identical with the pain of pleurisy. They may be accompanied by febrile movement. As regards symptoms, they may simulate pleurisy so far that, by practitioners who do not employ physical exploration, they are frequently confounded with pleurisy. But pleurisy is attended speedily with liquid effusion into the pleural sac, and liquid in this situation is represented by signs obtained by percussion as well as by other methods. With the aid of signs it is generally an easy problem to determine that pleuritic effusion has occurred. It is easy, also, to determine, by the simple fact that the normal resonance on percussion is unaffected, that effusion has not occurred. In this way pleurisy is excluded, and an important error of diagnosis avoided.

In my arrangement of subjects, gentlemen, I had expected to finish the consideration of percussion in this lecture. It remains, however, to speak of the application of this method of exploration in cases of tuberculosis, and to say something respecting the rules to be observed in the practice of percussion, the instruments which may be employed and other points. As I have occupied the hour, I must defer these matters until my next lecture.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. VIII.

The pathological relations of portal congestion may, perhaps, be rendered more easy of comprehension and memory by the following scheme or diagram:

HÆMORRHOIDAL DIATHESIS.

Primary Physical derangement, *portal capillary congestion.*

IMMEDIATE PATHOLOGICAL CONSEQUENCES.

Impeded circulation in the apparatus of digestion and defecation, and deficient depuration of the venous blood returning from it, resulting in—

Gastric, duodenal, or colonic dyspepsia, and following these, œsophageal and pharyngeal affections.

Jaundice, gallstones, colics.

Diarrhœa, constipation, piles and other rectal disorders.

Splenic physconia.

The lungs, skin, and kidneys having extra duty thrown on them in order to remove effete matter retained or imperfectly digested matter absorbed, become liable to disease; hence the connexion of recurring attacks of pneumonia, bronchial congestion, one form of asthma, chronic catarrhs, laryngo-tracheal ulceration, skin diseases, etc., with the hæmorrhoidal diathesis.

According to constitutional tendencies and external influences, the disorders of the digestive apparatus naturally engender *diminished vital energy*, shown with reaction in irritative fever, without in anæmia. The effects of impeded portal circulation may be propagated to the general, and result in *passive congestions*, first and most naturally in the organs which, lying contiguous to the more immediately affected ones, are therefore most likely to share in their derangements, nervous or circulatory; second, in any organ however remote. In earlier years and more vigorous constitutions, the local disorder may put on more or less of an inflammatory character, being in such case and thereby at once removed from the category of ailments curable by mineral waters; or a persistent congestive condition of the abdominal contents of more active character may obtain, constituting *abdominal plethora*, and producing at first mere functional disturbances, but if unchecked, predisposing to and ending in organic changes, especially in the pelvic viscera; but, in a vast majority of cases, the congestion is only passive, and though persisting year after year, giving rise to disturbed function and pain or inconvenience, rarely ends in organic mischief. It is to this passive hyperæmia that the French and German writers have applied the term *venosity;* convenient, expressive, and suggestive of the true condition.

In proportion as the anæmic variety of the hæmorrhoidal diathesis persists or is developed, does the migratory tendency of the local congestion increase; hence causes so slight as to be considered inadequate, and therefore habitually overlooked, are followed by effects often in important organs, rarely indeed threatening existence, but sadly embittering it. Probably by much the largest half of confirmed invalidism may be thus explained. Too long or too jarring a ride in a carriage, or a degree of cold apparently too inconsiderable to be worthy of taking precautions against, may produce a colic that shall prove most obstinate, recurring again and again on slighter and slighter provocation, and susceptible of but little effective relief by ordinary medication, but disappearing spontaneously either on the occurrence of piles in any of the accustomed forms, or by the migration of the congestion to some other organ or locality. A trifling exertion of the voice in the fresh air may induce a pharyngeal catarrh, in which the obstinate hawking will wear out the patience of both physician and sufferer, and indeed may sometimes pave the way to fatal complications in the respiratory organs. One of the most annoying circumstances connected with these anæmic cases is a congestion of submucous tissue just sufficient to arrest secretion, and obstinately remaining at that point; the converse as it were of the blennorrhœa characterizing parallel affections in the scrofulous diathesis. The rectum, vagina, and pharynx suffer most frequently in this way, giving rise to many obvious and some very common annoyances. All local applications fail in giving more than the most temporary relief, if even that; the only cure is the removal of the diathesic vice.

Disturbances in the innervation of the organs affected with passive congestion in the hæmorrhoidal subject follow as a matter of course, simple hyperæsthesia being by far the most common; no words need be wasted on them; their cure is the modification of the diathesis.

Assuming these views to be correct, I proceed to insist that no means are known comparable to mineral waters in the power of fulfilling the intentions thus presented. To render the biliary secretion free and healthy, without lowering the tone of the system or deteriorating the quality of the blood; to restore, if necessary to increase, the suppressed or scanty secretions of mucous membranes, kidneys, and skin; to invigorate the digestive functions; and by doing these things to equalize the circulation, to relieve local congestion, if desirable to derive from a given organ: all these tasks mineral waters perform in a most satisfactory manner. In their employment, however, we must take into consideration another element besides the chemical composition, namely the *temperature.*

That low temperature is one of the important sources of the effects of cold mineral waters, is evident; for when simple cold water is taken into the stomach, especially the first thing in the morning, it occasions a sense of cold there, diminishes irritability, and lowers functional activity in nerves, bloodvessels, and muscular fibre. If the quantity ingested be large, or the temperature very low, its effects are felt in the whole system, occasioning shivering, retarded pulse and respiration, and diminished or arrested function in every part. Then follows reaction, with increase of warmth, of secretions in stomach, intestines, kidneys, and skin, of functional activity in nervous system and bloodvessels, and a general feeling of well-being. The daily repetition of this process, especially before any part of the digestive apparatus has been called upon to perform any duty, soon diminishes morbid irritability, and restores functional activity to the chylopoietic viscera, while relief of local congestion follows, and by a restoration of healthy character to the blood, the whole system recovers a persistent vigor.

Hot water, again, within certain limits of temperature, occasions an agreeable sense of warmth in the stomach, and increases the flow of blood to that organ, as well as its functional activity. This effect extends, and is soon felt, first in the abdominal viscera, then in the whole system. Every vital process is spurred to increased activity. The pulse beats fuller and faster, respiration becomes deeper and quicker, absorption is hastened, and the secretions of the liver, stomach, intestinal tube, kidneys, skin, and lungs, are increased. If the heat of the water is excessive, or quantity too great, the circulation is much affected, and palpitation of the heart, full and rapid pulse, and congestions in head and lungs occur, not without danger. On their high temperature then depends much of the great power exerted by thermal waters, in restoring secretions, relieving congestions, occasioning absorption, hastening and invigorating all organic vital processes, and thus changing for the better the whole constitution.

When mineral waters are taken tepid, or rather the nearer their temperature approaches that of the body, the more do we obtain *only the pure medicinal effects of the ingredients*, without excitement direct or indirect.

For the relief of the class of disorders of the abdominal and pelvic viscera, last under our consideration, there is no rival to Carlsbad, a hot, alkaline, glauber-salt water; but then no medicinal agent requires more care in administration, more deliberation before prescribing. In this water the glauber salt, acting as a revulsive on the intestinal canal, considerably modifies the exciting effect of the heat; while the iron and manganese render its tonic influence more permanent, and prevent the powerful solvent effects of its alkaline ingredients from proving too debilitating. It is, however, often advisable to follow up a course of Carlsbad, after allowing an interval of two or three weeks, with some simple strong chalybeate, as Pyrmont or Spa. There are a great many springs at Carlsbad of the same chemical composition very nearly, but differing in temperature according as the distance increases from the central subterranean cauldron; and it is found that to produce the most profound alterative action, and to arouse the functions of the kidneys and skin more particularly, the hottest springs are the best; to increase the action of the intestinal canal those which are cooler, and to secure simple alterative action, resolution of congestion, restoration of mucous secretion, the coolest, whose temperature is 135° Fahr.

It is not generally advisable that Carlsbad should purge, which it is not apt to do, though the bowels should not be allowed to become constipated during its use. After a time it is quite common for critical evacuations or fœtid urine overloaded with effete material to occur, or alvine discharges abounding in mucous, bilious, sometimes fatty matters, offensive and tarry, after which rapid convalescence may be expected.

Carlsbad may be prescribed in the graver forms of most of the chronic disorders of the liver and digestive apparatus which we have been considering. In enlarged and in movable spleen it displays great curative power. If occasioned by intermittent, the use of the water sometimes developes a single fit of ague and fever, after which the splenetic physconia speedily subsides. In obscure cases of tic douloureux and migraine, commonly sympathetic with some marked or latent disorder of the digestive apparatus, Carlsbad proves curative when every other treatment fails of giving relief. Space will permit me to say no more on this spring. I will only caution not to prescribe it in any case of disorganizing disease, or where the vital powers are much enfeebled, and will relate one case in illustration of its powers in the hæmorrhoidal diathesis.

A farmer in Ohio, of marked bilious temperament, after twenty years of habitual piles, and occasional attacks of lumbago, became afflicted with sciatica. When I first saw him his sufferings had gradually increased during a year, in spite of the treatment of several respectable practitioners, until he had been compelled to pass five months of agony mainly on his hands and knees, partially supported by bedding and the strong arms of his numerous family. Any other posture rendered his suffering unbearable. The result of my own treatment was to enable him to hobble on crutches round his farm yard, with a wasted and still very painful left leg. In this condition he commenced the use of Carlsbad in May, 1856. At the end of the first week he laid aside one crutch, at the end of the second, the other; the cane followed; and after only four weeks' exclusively internal use of the waters he started on a journey of 800 miles entirely free of pain and rapidly recovering strength. I saw him last in the winter of 1858–9 a hale and hearty man, never having suffered a day's sickness since his journey, and entirely quit of both piles and lumbago.

Where there is too much irritability to admit of the use of Carlsbad, Ems, a milder and cooler alkaline water, may be substituted, but in such cases I generally prefer the cold waters; and of these the Rakoczi of Kissingen stands at the head. Singularly parallel with Congress in composition, it differs in containing one third less water, and in possessing five times as much iron. In the simple hæmorrhoidal diathesis, and in all disorders depending thereon, it is as nearly a specific as can be found for any disease. With it I have cured cases of bleeding piles existing from childhood in a young man of nineteen, and in his father for forty years. The Elizabethan spring of Homburg most resembles Kissingen in composition, but containing a large proportion of chloride of calcium and carbonate of lime, it is more heating and irritating than the latter, and cannot be used when the functions of the stomach and duodenum are much weakened or disturbed. The only other two waters I shall mention as peculiarly applicable to the cases before us, are Marienbad and Franzensbad, the latter to be considered as a milder form of the former, alkaline-glauber-salt. Marienbad is peculiarly adapted to the florid muscular man of means, with indigestion, hepatic engorgement, inaction of the bowels, or hæmorrhoidal congestion, from leading a too luxurious and self-indulgent life without sufficient exercise. Carlsbad would be dangerously stimulating to such a one; Kissingen too rich in iron; the cooling, relaxing Marienbad is the water, but it should be taken very freely in a regular course.

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SEVERE GUN-SHOT WOUND OF BRAIN.

LOSS OF LARGE QUANTITY OF CEREBRAL SUBSTANCE—RECOVERY.

BY GEO. B. WILLSON, M.D.

PORT HURON, MICH.

On June 2, 1860, I was sent for, to see a man, æt. 20, some sixteen miles distant, who had been injured by the explosion of a gun the day previous. The messenger stated that a part of the gun-barrel had been blown completely through the forehead of the patient, and had escaped at the back of the head. Two doctors had been called to see him a few hours after the accident, but faled to extract a large piece of iron which yet remained within the skull. On reaching the house I learned that the patient had, on the day previous, attempted to discharge an old shot-gun which exploded, and that some parts of the stock, or barrel, or of both, were lodged in his head. He was at first knocked down, but after a few minutes was able, with a little assistance, to walk into the house. Since the accident he had retained consciousness unimpaired, and could talk rationally and with ease. His forehead felt sore, and he complained much of pain in his left eye, but otherwise did not suffer.

Every attempt to move the iron produced a feeling "like tearing his eye out," as he expressed it. He was lying in bed with his forehead and one eye bandaged; skin natural; pulse slow, and rather full but quite compressible, 64 per minute; breathing normal; tongue showed nothing unusual; mind comparatively composed, the only anxiety manifested being to have the metal extracted; intellect clear, and rational; sensation and motion unimpaired. I removed the bandages, and found the tissues around the left eye much swollen, the conjunctiva highly injected with blood, and the ball itself protruding considerably. His forehead was blackened and burnt with powder, and presented a large irregular opening, over two inches in length, from below upwards, and an inch in width. The upper part of the opening tapered to an obtuse point, so that it had a somewhat triangular outline, the long angle of which was upwards, and reached a point about half way between the left frontal eminence and the mesian line of the frontal bone, at the upper part of the forehead; the base corresponding with the inner half of the superciliary ridge of the same side. From this opening disintegrated brain substance oozed out quite freely, and according to the statement of the attendants amounted to half-a-dozen tablespoonfuls.

On careful examination of the wound a small portion of a screw which was imbedded in the brain showed itself. I soon found that the screw must be connected with other iron imbedded in the brain; for I found, on introducing my finger, that I could not reach its head, as it passed through another piece of metal at right angles. This latter piece of iron felt wider than my finger, and ran in a slanting direction from below upwards, and from before backwards. From its position and direction I decided that the screw passed through it near its middle forming a T; the screw being the stem, and the unseen body the top of the T. One arm of the T was probably hooked down behind the posterior edge of the roof of the orbit and lesser wing of the sphenoid, in the middle fossa of the base of the skull; its point projecting into the sphenoidal fissure, and pressing upon the nerves and tissues at the posterior part of the orbit. This would account for the protrusion of the eye, and the pain experienced when tension was made on the screw. The other arm extended upwards and backwards, towards the vertex, and probably reached to, and lay up against, the under surface of the skull near the top of the head, to one side of the falx cerebri. This would account for my inability to lift the first arm upwards, from behind the lesser wing of the sphenoid, by using the screw as a lever. It seemed probable that, in such attempts, the extremity of the upper arm struck against the under surface of the skull, and thus prevented the elevation of the body. All this was merely guessing, for I could not prove its correctness: but, as it agreed best with what I could observe, I determined to act upon it.

The indication was to push the presenting part of the screw upwards and backwards, so as to tilt the upper arm slightly downwards and backwards from the under surface of the skull, and give it room to play; and then to lift it upwards and backwards, so as to raise the lower arm from behind the lesser wing. This it was impossible to do; for, in attempting it, the edge of the skull at the upper part of the wound would not admit of the raising of the screw. If the screw was a little shorter, so that it would pass *under* the edge of the skull, it would do, but it was impossible, as it was situated, to cut it off. Or, if the screw could be shoved downwards, so as to get its point within the skull, the manœuvre could be effected; but there was danger of injuring some part of the base of the brain in so doing. I tried it, however, and did not succeed. Wondering at this, I put my finger down again by the screw, and discovered that it was slightly bent just where it came through the other piece, and this bend prevented its passage back. The only way left then, was to cut away a portion of the skull at the upper part of the wound, and thus give the screw space for the necessary movement. If my opinion as to the position of things and the cause of the difficulty, was correct, this would enable us to succeed; but if not, we would have wasted so much skull for no use. However, deeming a small piece of skull of but little consequence in such a case, and being fully supported in my view by the opinion of Dr. Crowell, who assisted me, I determined to enlarge the opening. I raised a small portion of the scalp, and with the bone forceps excised a small V-shaped portion. In a few minutes I had the satisfaction of lifting out the mass from its bed, and proving, that as to shape and position of the pieces, my inferences had been correct. The mass consisted of the *screw*, about three inches in length, and the *breech-pin* of the gun, through the middle of which the screw passed at nearly right angles. The breech-pin was a piece of iron about the size and shape of a good-sized little finger, slightly tapering at one end to a tolerably sharp point, and at the other end being cylindrical and blunt, and of about five-eighths of an inch in diameter. The large end had lain upwards, and the pointed end downwards, and, being small enough at the point, had probably protruded into the back part of the orbit. The next step was to find and extract such other fragments of iron or bone as had been driven into the brain by the explosion. As the cavity now seemed quite large—in fact as if all the anterior and a part of the middle lobe of that hemisphere had been destroyed, I did not hesitate to scoop out the disorganized cerebral substance with considerable freedom; and I do not think there could have been much less than a teacupful extracted. I then probed the wound deeply with my finger; and in passing it back where the larger end of the breech-pin had lain, I felt, at the depth of over 4½ inches (by measurement), two pieces of bone plate, each nearly half an inch in diameter, lying back in the *posterior* lobe of the cerebrum. These I extracted with long narrow forceps, and afterwards several smaller pieces, and many particles—mere crumbs—of bone from other parts of the cavity. After gently scraping the torn and bruised walls of the cavity, and cleansing the edges and surfaces of the membranes, I put a plug of oiled patent lint into the wound, securing by adhesive strips and a bandage.

During the operation I had a chance to discover the amount of sensibility which the brain possessed. I inserted my finger as far as it would reach back on a level with the hole in the skull, and then inquired after the sensations of the patient. He answered that he felt something in his head as large as the body taken out. In answer to another question, he said:—"It is about the middle of my head, with its furthest end nearly between my ears, but a little to the left side." I then put my finger in as far as I could, so as to cover half the metacarpal bone also, and asked, "Do you feel it moving?" "Yes." "How deep is it in now?" "It is further back than my ears: it is near the back of my head." "Does it feel hard like iron?" "No, it is soft. It is your finger." I pressed a little with my finger, and asked, "Does that hurt?" "No." "Do you feel a pressure on any part?" "Yes, away in, far." I then put my finger on other parts, and on the *surface* of the brain, under the skull, and in each instance he could indicate the place. Then, taking a pair of long blunt forceps, I inserted them back into the wound, and inquired as to the sensation. He said that the substance was smaller than my finger and harder; that it felt like cold iron; and so on: showing that the sensation of touch was perfect, though there was no tenderness. His appreciation, too, of the difference of temperature, or its conduction, was shown by his saying that the iron "felt cold." When I expressed some surprise at the accuracy of sensation, he laughed and said,—"Why, I can feel everything in there, just as plainly as in any other part of my body."

After the dressing, his pulse had increased in frequency to seventy-six, and in all respects he seemed quite natural, and expressed himself as "feeling much better and quite comfortable," and having no pain or soreness except in his eye.

I ordered cool cloths to the swelled eye, and making a small opening at the lower part of the wound, for escape of matter, I directed him to lie on his left side and partly on his face, and promised to see him again on the third or fourth day.

On the fourth day I revisited him. He had needed no medicine, and taken none. The cerebral substance had grown so as to fill the cavity to the skull. I cleansed the surface, and then made a small conical compress of lint and covered it with oiled chamois skin, and laid it into the opening, so as to press upon the cerebral mass. I then strapped it down tightly with adhesive straps, at the same time drawing the edges of the scalp tightly around the periphery of the oiled compress; and reapplied a bandage. I then gave his attendants very particular directions about dressing it, and forewarned them of the danger of *hernia cerebri.* I told them to be sure not to allow the brain to protrude, but to strap the compress down tightly as they had seen me do, and to dress it every day—making the compress smaller at each dressing.

On the evening of the third day after they sent, saying that they could not prevent hernia cerebri; that it had gained on them each day, and now protruded some distance. I lost no time in seeing him, and found that firm compression was so painful that they had given up the attempt and left him to chance a second time. I told him he must bear the pain *nolens volens;* so taking a firm compress of oiled chamois stuffed with pressed cotton, I strapped it down so tightly that I got the tumor well within the cranium. I then gave them still more strict injunctions, and left a compress of pressed sponge to be wrapped in chamois and used the next time. I told them that if they could not get the tumor back at the next dressing they must send for me without waiting longer. I then left, promising to see him again in five days, should my attendance not be needed sooner. They saw that he did not complain or oppose me when in dressing the wound I hurt him much more than they; so, taking courage from that, they succeeded in preventing subsequent protrusion. I omitted to mention that the eye was nearly well at my previous visit, and quite well at this one. I visited him at the appointed times, but there was nothing in those visits worth reporting. In five weeks from the first dressing the external wound was closed. He was able to walk about in less than three weeks after the accident, and felt well most of the time, having to take medicine internally only twice. At the end of the fifth week he was discharged with proper directions as to when to begin making attempts to stoop over, and how to follow them up. He has been very careful since as to his exercise, but he is able to attend to his duties (those of a farmer's boy) as usual, and feels quite well and strong as before.

LITHOTOMY.—ALLARTON'S OPERATION.

By J. GRAFTON, M.D.,

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As the question, What shall be "the operation" for stone? is again before the surgical world, and can only be safely decided by carefully recorded statistical results, I offer for publication in your pages the following case, which, aside from its statistical bearing, otherwise possesses no peculiar points of interest worthy of record.

The patient, J. S. Allen, of Oswego county, æt. fifty-seven, has been troubled with symptoms of stone for the past sixteen years, has experienced forty or fifty attacks of severe urinary hemorrhage, has passed for a number of years large quantities of mucus and muco-purulent matter; is now, prior to the operation, totally unable to retain his urine; micturition being attended with severe spasm and prolapsus ani. On the 8th of July, 1861, I placed him under the full influence of chloroform, introduced a medium-sized staff, grooved on its convexity, into the bladder, and immediately struck the stone, which being heard and felt by all present, I at once introduced the forefinger of my left hand, well oiled, into the rectum (which had previously been emptied), as far as the prostate gland, directing its anterior surface towards the staff, and pressed firmly upon it so as to assist in holding it securely in its proper position.

A narrow straight bistoury, with its cutting edge directed upwards, was then passed directly in front of the anus, deeply down in the groove of the staff, which it struck readily, penetrating the membranous portion of the urethra, directly in front of the prostate gland. After moving the point of the knife from side to side, in the groove of the staff, to assure me of its safe lodgment there; I next made an incision directly upwards towards the bulb, of sufficient extent to admit the tip of my forefinger, and during the withdrawal of the knife from its deep position, made the external wound directly upwards in the middle line towards the scrotum, depressing the handle of the knife towards the symphysis so as to avoid wounding the bulb. The forefinger, well oiled, was then passed into the wound, the slit in the membranous portion of the urethra being readily found, and the finger passed slowly onwards with a rotary motion into the bladder, the staff serving as a director, which was now withdrawn, the forceps passed into the bladder, and the stone, which measured three and three-quarter inches in circumference, extracted. The amount of blood lost during and subsequent to the operation did not exceed two ounces. In this operation I was ably assisted by my kind friends Dr. Lyman Buckly, of Sandy Creek, Oswego co., and Drs. Kinney and Clark, of Mannsville, Jefferson co. The after-treatment was ably conducted by Dr. Buckly. In a few days the patient was convalescent and able to leave his bed, passing water in a full stream, with considerable force, by the urethra; returned home sixteen days after the operation with the wound healed; has within the month travelled twenty-six miles on foot.

Should the chief casualty urged against this so-called Allarton operation, "large size of the stone," occur, what would be the objection against enlarging the external wound downwards through the anterior wall of the rectum, the deep wound backwards through the centre of the prostate, for two-thirds or more of its extent? converting this operation in fact into Lloyd's, which he has adopted in his practice at St. Bartholomew's Hospital, London, with uniform success for many years?

THE FRENCH AND THE ENGLISH.—The public documents of 1859 show that the mortality in that year in Great Britain was at the rate of 2·196 per cent., in France 2·670, but this latter is considerably above the average of that empire, owing to the prevalence at that time of dysentery, diphtheria, and some other epidemics. The marriage rate in Great Britain was 1·650 per cent., in France 1·638. The birth rate in Great Britain was 3·482, in France 2·778. Thus the marriage rate and the birth rate being lower in France than in Great Britain, and the death-rate higher, the natural increase of population is less in France than in Great Britain. The births in France in 1859 were 1,011,787; there is no record of the births in Ireland, but it is estimated that the births in the United Kingdom amounted to nearly the same number; but the deaths in France were 972,556, while the deaths in the United Kingdom were estimated at not exceeding 651,171, fewer deaths by 300,000, with about an equal number of births.—*British Med. Journal.*

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. STEPHEN SMITH.

STRICTURE OF THE URETHRA.

[Reported by HENRY M. LYMAN, M.D., House Surgeon.]

Impermeable Stricture—Perineal Section—Death.

H. Y., æt. 42, a native of Germany, a book-keeper by trade, and a moderate drinker, was admitted to the hospital on the 13th of April. Thirteen years previously he had suffered from gonorrhœa. A stricture of the urethra was the result. The constriction became gradually worse, and last winter the patient was driven to the hospital for relief. At that time, it was with the greatest difficulty that any instrument could be introduced; but, obtaining relief from the more urgent symptoms, he left the hospital. April 15th, he again entered the hospital, on account of increased difficulty of urination. Two days after admission, the urine ceased to flow, and the distended bladder could be felt above the pubes. Full doses of Dover's powder were administered, and the patient was placed in a warm bath; a small quantity of urine made its escape at this time. April 16th.—Complete retention; the bladder rising nearly to the umbilicus. The repetition of the opiate and the bath afforded partial relief.

April 17th, 2 P.M.—The same condition continuing, and all attempts to place a catheter, a sound, or a bougie, in the bladder having failed, it was decided that an operation must be performed for the relief of the patient. A steel sound (No. 8) was passed down to the bulbous portion of the urethra, at which point it was arrested by the stricture. An incision was then made through the perineum, and carried forward to the point of the sound. A very small director was gradually insinuated through the stricture—a sharp-pointed bistoury following in its groove. After twenty minutes employed in this dissection, the limits of the stricture—which occupied fully an inch of the bulbous and membranous portions of the urethra—were passed, and the sound slipped easily into the bladder. A catheter (No. 12) was introduced, and the patient was carried to his bed. Pulse 82, steady and moderately full. April 18th.—Patient slept well during the night; pulse 72. 6 P.M.—Pulse 92, full. April 19th.—Did not sleep during the night. Tongue white, pulse 72, not very full. No appearance of inflammation about the perineal incision. The catheter was removed and cleaned. April 20th.—Another restless night, pulse not accelerated, Dover's powder at bedtime. April 21st.—Rested well during the night, catheter again removed. Small granulations forming in the wound. 6 P.M.—Skin hot; pulse 104. Spiritus Mindereri. April 22d.—Pulse 112, small, skin slightly moist. Ordered to take whiskey, milk, and eggs, every hour an ounce. April 23d.—Tongue cleaner, pulse fuller, 115. Patient seems stronger. 6 P.M.—Pulse 126, small; secretion of urine less copious; slightly delirious. April 24th, 7 A.M.—An abundant discharge of tarry fetid stools; pulse feeble, 130. Less delirium than on the previous evening, but the catheter brought no urine from the bladder; the surface of the perineal wound was dry and glossy. Cups were applied to the loins, and a large dose of pulvis purgans was administered. 9 A.M.—No change; the cups were reapplied. 1 P.M.—The catheter brings about half an ounce of turbid urine. The cups and the drug were repeated, and the patient was placed in a warm bath. There was a constant, mild delirium. 5 P.M.—Breathing rapid and laborious; pulse almost imperceptible; tongue slightly brown; skin soft and moist; delirium constant and more active; bowels freely evacuated. 6 P.M.—Pulseless. An hour later the patient was seized with convulsive shuddering and died.

Sectio cadaveris, forty-two hours after death. *Head.*—There was marked congestion of the posterior cerebral meninges, more intense on the left than on the right. No abnormal effusion under the arachnoid, nor into the ventricles. The substance of the brain was healthy. *Thorax.*—The lungs and pleuræ were perfectly healthy. The heart was large, soft, and flabby. *Abdomen.*—The peritoneum was healthy. The spleen weighed 14 oz., but appeared to be healthy. The liver was soft and flabby, it weighed 4 lbs. 6 oz. The weight of the right kidney was only one ounce; the organ was darkly congested, very soft and oily. The left kidney was large and soft, its cut surfaces oozed oil. Its weight was seven ounces. The coats of the bladder presented no unusual appearance. The prostate body was considerably enlarged, but without obstruction of the urethra from that cause. The urethra, excepting that portion which had been the seat of stricture, was normal in its appearance. There was, however, a diverticulum, large enough to contain an English walnut, situated on the under side of the canal, two inches anterior to the triangular ligament. This pouch occupied a portion of the intermuscular space of the spongy portion of the urethra, with which it communicated by an orifice as wide as its own greatest diameter. It was not lined by mucous membrane, and appeared to be of long standing, as if it had been the cavity of an old peri-urethral abscess.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

Results of some Trials of the Hypophosphites in the Treatment of Phthisis. By JAMES RISDON BENNETT, M.D.—The confidence which Dr. Churchill claims for these salts is founded upon his theory, that tubercular diseases have their origin in a diminution of the oxidizable phosphorus contained in the body, the deficiency of which he attempts to supply by the administration of the hypophosphites of lime and soda, which he says he has found by experiment to be the best adapted for insuring the absorption and assimilation of the deficient element, while the hyperphosphite of lime, by supplying another element assumed to be deficient in the tubercular constitution, he thinks specially adapted to certain cases. Neither the theory nor practice is confirmed by other pathologists and therapeutists. According to Becquerel and Rodier, the phosphate of lime is present in an increased quantity in the blood of phthisis, and Beneke affirms, that in all cases of tuberculosis with emaciation, the earthy phosphates in the urine are increased; neither have we sufficient therapeutical evidence to commend these salts to that degree of confidence claimed by Dr. Churchill. Dr. Bennett confines his remarks to cases treated by himself, having no reference to the experience of others. Of the large number of cases in which the trial was made, he reports twenty in the *Med. Times and Gazette*, in eleven of which the disease steadily advanced while under treatment, giving no evidence at all of improvement. Of the remaining nine, four only manifested any decided improvement, of the permanency of which there were no proofs in any one instance. In the cases reported, the hypophosphate of soda was the salt used, though the salt of lime he has employed in many instances, with results not differing materially from those of the soda salt. Of the two, however, he is disposed to prefer that of lime. The only special influence (if any) exerted on any one function of the body seemed to be on the digestive functions, the tongue, in many instances, improving in appearance, and the appetite increasing; but he questions whether this has not been as much from the abstinence from all remedies capable of deranging the stomach, as from any direct influence executed by the phosphatic salt; or whether a little lime water or citrate of magnesia would not have had the same effect; or, assuming that the new remedy has been useful in allaying irritability of the stomach, and improving digestion—effects resulting from small doses of alkalies—whether this may not be due to the base, rather than the acid with which it is combined. In many instances of gastric derangement, interfering with all treatment, and with the taking of the most simple food, emaciation and debility rapidly increasing, he has found the saccharated solution of lime, according to a formula recommended by Dr. Clelland in the *Edinburgh Medical Journal* for August, 1859, in doses of from twenty to thirty minims three times a day, prove of signal service, acting not only as an antacid but as a tonic. Independent of the action of these salts on the stomach, and intestinal and pulmonary mucous membrane, Dr. B. sees no evidence of any specific anti-tubercular effects. A trial, however, may elucidate the benefit that occurs, in many instances, from a temporary or entire abandonment of other remedies, and the adherence to regulated diet, and the hygienic means, of such paramount importance in all cases of tubercular disease. It may be added, that the cases were taken without any selection, except that such as presented urgent special symptoms requiring immediate attention were not considered eligible. The remedy was given three times a day, generally in an infusion of quassia, accompanied by a meat diet and porter.

Hooping-Cough.—A recent number of the London *Med. Times and Gazette* contains a letter from M. Foster, F.R.S.C., on the virtues of the common clover hay as a remedy in hooping cough. He has used it since last summer in about fifty cases, and found it to fail only in three or four. While other symptoms are to be met with emetics, aperients, salines, and tonics, it relieves the cough of its spasmodic character in a few days. He says it acts best when given so as to slightly affect the bowels. The hay should be sweet and leafy. The formulæ are:—℞ Trifolii in fœno. ℥ ij; aq. bullient. Oj; macerate for four hours, and strain. A child five years old may take a tablespoonful three times a day. A syrup is prepared as follows:—℞ Trifol. in fœn. ℥ ijss; sacch. cand. ℥ ij; aq. bullient. Oj.; macerate the hay in the water for an hour with gentle heat, then boil down to proper consistence. A child five years old may take two teaspoonfuls four times a day. A fluid extract is also prepared.

Glycerine and Camphor in arresting the Secretion of Milk.—Dr. Harriss, of Savannah, employs a saturated solution of camphor in glycerine, in preference to belladonna. It is gently applied over the surface of the breast by means of flannel, several times a day. The same solution, with the addition of four grains of tannin to the ounce, is of utility in sore nipples.

Croup, its Varieties and Treatment.—Dr. E. Whittle, senior surgeon to the South Dispensary, Liverpool, believes (*Dub. Quart. Jour. of Med. Sci.*), that the uncertainty among medical men, as to the best mode of treating croup, arises, in some measure, from the confounding of different forms of laryngeal affections, which require, in some respects, different treatment. He divides the affection into seven varieties, which, though strictly speaking they cannot all be called croup, yet are all affections of the larynx, attended with constriction of the glottis, and are often confounded together under the name of croup. 1. Cynanche trachealis of Cullen; true croup, with formation of false membrane, characterized by the suddenness of the attack, and often proving rapidly fatal if relief is not early afforded. In the treatment of this variety, he has long tince abandoned the old plan of bleeding, and giving calomel and tartar emetic freely; but is more successful by having recourse, in the first instance, to the warm bath and an emetic, followed, if the symptoms persist, by small doses of Dover's powder and nitrate of potash. If the tongue is foul, or the bowels loaded, a dose or two of calomel accompanies the first doses of Dover's powder. Should the disease progress, he would resort early to tracheotomy, before the strength is too much reduced, or the false membrane is deposited far down the trachea. 2. The angina stridula of Bretonneau; pseudo croup of Guersant; acute asthma of Millar, characterized by spasm of the glottis, excited by the inflamed and thickened condition of the mucous membrane of the larynx and trachea, without formation of false membrane. It commences with an occasional hoarse cough, exciting little attention for the first few days, when the breathing becomes croupy, and the cough assumes a sharp, ringing, barking sound. This is, in Liverpool, the most common, dangerous, and fatal form of croup, and almost universally confounded with cynanche trachealis. A little temporary relief may be afforded by the old routine of leeching, emetics, calomel, and antimony; but, after a few hours, the breathing becomes more stridulous, the symptoms rapidly increase in severity, and unless tracheotomy be performed, the child soon dies of suffocation. The treatment of this form of croup does not differ from the preceding; but the point is to attend to it before the urgent symptoms come on, and persevere until the shrill barking cough disappears. Should the case be neglected until the breathing becomes croupy, no time should be lost, but tracheotomy at once resorted to. It is in this form of croup that the operation is preeminently successful, there being no false membrane to obstruct the tube. Bretonneau describes this disease as of little importance, which may be true in the dry climate of central France; but our author insists that in the cold, damp climate of England, particularly in the winter months, this affection is the forerunner of the most fatal form of croup. 3. Croup complicated with diphtheria, which is diphtheria extending into the larynx, the only treatment for which is tracheotomy. 4. Symptomatic croup, sometimes met with in the early stages of the exanthematous diseases. If treated à cynanche trachealis, the rash will generally make its appearance, and the croup subside. This should not be confounded with that form of croup often met with in the advanced stages of rubeola, scarlatina, variola, etc. 5. Croup caused by an ulcerated condition of the larynx, either syphilitic, or following the ulcerated throat of scarlatina or variola. The immediate cause of the croupy breathing is spasm, excited by the irritation of the ulcers, and may be often treated successfully by tracheotomy. These cases require the topical application of a solution of nitrate of silver to the larynx. 6. Mechanical croup, from œdema of the larynx, etc., can only be relieved by a timely operation. 7. Nervous croup; laryngismus stridulus, purely a nervous affection, generally a complication of dentition, and mostly met with in families of a strumous diathesis. It comes on suddenly, with a convulsion of more or less severity, followed by a shrill, gasping inspiration, something like a whoop after a paroxysm of hooping-cough. The attack may be short, but repeated once or twice in the same night, and it sometimes happens that the child is suffocated at the very outset. With regard to the treatment of this affection, he simply alludes to it as consisting, at the time of the paroxysm, in dashing cold water on the child's face, plunging his feet into hot water, or anything which will give a sudden shock to the system, and in the intervals strengthening the child by the use of tonics, and by having it almost constantly in the open air.

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Surgeon of the 18th Regiment of Mass. Vols.—After Cobb's battery of light artillery was about ready to leave for the seat of war, it was discovered that it would be received into the U. S. service as a company merely. This course caused the resignation of the staff officers, and Dr. D. P. Smith, of Springfield, Mass., whose appointment as their Surgeon we have noticed, was immediately appointed Surgeon-in-chief of the 18th Regiment Mass. Volunteers, for three years. Our readers will remember that this regiment passed through New York a short time since, *en route* for the seat of war. It is now encamped on Arlington Heights, Virginia, near Fort Corcoran, and forms part of the first brigade of Gen. Porter's division of the Army of the Potomac.

The Pennsylvania Medical Board is sitting daily, at Willard's hotel, examining medical officers attached to regiments which left that state before they were transferred to the state authorities.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 25th, 1861.

· Dr. A. C. Post, President, in the Chair.

INJURY OF SKULL—CONVULSIONS—RECOVERY.

Dr. Conant presented a small piece of skull removed from a child, aged six years, who, a week ago last Saturday, while playing upon a balcony, fell a distance of twelve feet, striking the left side of the head upon the edge of an iron grating. A physician in the neighborhood was sent for, who, not comprehending the nature of the injury, simply prescribed cold applications. Soon after, the child became more or less unconscious. Coma soon succeeded, and also convulsions on the side opposite the injury. The friends, becoming much alarmed, sent for Dr. Conant, who arrived about three hours after the accident. On examination, it was ascertained that a portion of bone, about an inch in length and half an inch in breadth, was depressed in the situation of the left parietal bos. A crucial incision was made over this part, when it was found that a fracture with depression extended horizontally across the crown of the head, almost to the opposite parietal bos; also, another ridge, with a corresponding depression, which extended backwards and downwards nearly to the foramen magnum. The portions of depressed bone that were separated were removed, but, notwithstanding this, the convulsions still continued. An elevator was then introduced under the exposed edges of the skull, and the depressed portions were raised to their normal position; the severity of the symptoms still remaining unabated, Dr. C. grasped a small piece of sponge with a bull-dog forceps, and carried it between the dura mater and bone in a direction downwards. The sponge soon became saturated with blood and was removed, when the convulsions almost immediately ceased, and the child was a little conscious. The sponge was introduced a second time, and again some fluid blood was absorbed. The following night was passed very comfortably by the patient; cold water was applied to the head and an anodyne administered. On Monday, two days after the operation, the child became a little fretful, and being crossed by his mother, was seized with another convulsion lasting two or three minutes. According to directions previously given, chloroform was administered, and in the course of an hour afterwards, Dr. C. saw the patient; the pulse was very quiet, soft, and compressible. On Tuesday, the child was attacked with three more convulsions, and yet the pulse was not very much excited. On Wednesday morning, Dr. Conant was sent for, with the intelligence that the patient had been in convulsions for two hours, and on his arrival, found that the convulsions were confined to the *left side*, they having previously been upon the right. The thought occurred to Dr. Conant, that this convulsion was caused by some injury to the spinal cord, which had been received during the fall. Chloroform succeeded in quieting the convulsions, but that same evening the left arm became paralysed. A blister was applied, aconite and veratrum viride were prescribed in suitable doses. On Thursday, the patient began to use the arm a little, and in about two days he was able to control the actions of the hand. Since then he has had no unfavorable symptom. At the end of a week from the day he was injured, he was sitting up in his bed feeling very comfortable. The portions of the skull which were previously depressed were, when the patient was last seen, becoming quite firm.

SYPHILITIC DISEASE OF BRAIN.

Dr. Finnell exhibited a portion of the cerebrum, removed from the body of a man thirty-four years of age, who, up to eighteen months before his death, was in the usual enjoyment of health. At that time he contracted syphilis, and in the course of a few months well marked evidences of secondary disease showed themselves. He suffered from sore throat, periosteal swellings, and a general disturbed state of health. When first affected, commenced taking medicine largely and freely, firmly impressed with the idea that it was the only way to get rid of his trouble. Being a politician, he necessarily was subjected at times to violent mental excitement, but in addition to this, he commenced drinking. The consequence of this was a steady progress for the worst until about a month previous to his death, when he was seized with a convulsion. This passed off after a few moments, and he was able to be about again. He had a second attack ten days after, and the third which he had on the day of his death (Saturday last), was soon followed by coma and thus terminated his existence.

Autopsy.—The brain presented well-marked evidences of inflammation, there being a large amount of serous effusion beneath the arachnoid, with yellow patches of fibrine scattered over the surface. In each lateral ventricle there was a teaspoonful of yellow pus.

He also presented the small portion of a clot removed from one of the lateral sinuses. He considered the case as one of syphilitic disease of the meninges of the brain, brought about by intemperate habits, imprudent medication, and intense mental excitement.

CASE OF NECROSIS.

Dr. Krackowizer presented specimens of necrosed bone, and remarked that they were of interest, as illustrating a point in operative surgery, in reference to the time during which the operation should be performed. He thought a good deal of harm could be done by operating too early, and an equal amount of mischief by postponement. The proper time to choose for such a proceeding was, as in the specimen presented, when the sequestrum was merely imbedded in the soft granulations which sprouted out of the involucrum.

The patient was a boy seven years of age, who, two years ago, was seized with symptoms of osteitis in the medullary canal of the right tibia, which, in time, formed an abscess, discharging from the front of the tibia by means of several sinuses. Through each of the openings a probe being passed struck dead bone. An operation was advised and accordingly performed. A T-shaped incision was made on the anterior portion of the tibia, and the flaps were dissected up, exposing the involucrum, which was formed of the compact tissue of the tibia. This was removed. There were two or three cloacæ on the outer aspect of the limb, which, on account of the thickness of bone between them, were united by means of Heine's osteotome, an exceedingly useful instrument for such purposes. The cavity of the involucrum being exposed, was found to be filled with velvet-like granulations, over which were scattered pieces of sequestrum, which could be lifted out with the greatest ease. The boy, since the operation, has done remarkably well, the wound being nearly filled up with granulations.

TUMOR OF NECK COMPOSED OF AN AGGREGATION OF SEBACEOUS FOLLICLES.

Dr. Krackowizer next exhibited a tumor removed from the left side of the neck of a patient forty-five years of age. The disease first appeared about three or four years before as a small nodule, and increased gradually without giving rise to any pain. The patient did not think at first that it was worth while to have anything done until persuaded differently by his friends, when he applied irritating plasters, which resulted in the formation of excoriations and numerous superficial bleedings. The tumor was situated upon the sterno-cleido-mastoid muscle, near the point where it was crossed by the external jugular vein; it seemed to be closely connected with the skin, which on the surface was of a pale reddish color. The papillary substance seemed to be in the state of a warty hypertrophy, the epidermis peeling off in various sized scales. It sprang up from the surface of the skin pretty abruptly, with a narrow neck, which was overspread in a mushroom-like form. Semi-lunar incisions were made, and the mass was dissected out in the usual way. It showed on its attached surface, where it overlaid the superficial fascia, that it was composed of an aggregation of cysts, through which shone their contents, consisting of a yellowish amber-colored fluid. On closer examination, it proved to be an aggregation of sebaceous follicles, the like of which, in such a situation, he had never seen before; the surface was marked by some openings more or less oval or elongated, which allowed the probe to enter to some depth into the substance of the tumor. The fluid contained within the cyst was made up of shrivelled epithelial scales, and an unlimited quantity of oil globules aggregated in greater or less quantities; the cyst wall was lined on its interior by the laminated substance common to atheromatous cysts.

American Medical Times.

SATURDAY, OCTOBER 12, 1861.

THE PRELIMINARY EDUCATION OF MEDICAL STUDENTS.

There is no literary institution in the United States that does not put every student that seeks to enter its halls to the test of a rigid examination in the elementary branches of learning. If not found proficient, or not to have attained the required standard, he is refused admission, and compelled to turn back and qualify himself for those higher studies, or seek some employment better suited to his talents and acquirements. We are not aware that any one has complained that this system is too rigid, or that it is unjust. No one has even suggested that it were better to allow every student who applies for admission to the classes of our literary institutions to go through a regular course unchallenged and obtain what education he could, urging that thereby he would be a more useful man than he possibly could be uneducated. The position would certainly not be irrational, and might be maintained with a good array of arguments. On the contrary, all interested in the cause of education unite in sustaining the system, and give the best support to the colleges whose examination is most stringent. Nor do the professors in these institutions complain that by being thus careful in guarding the portals to the halls of learning they so effect a diminution of their classes as to endanger the very existence of their respective schools. There exists among them a spirit of emulation which exhibits itself in efforts to graduate classes well appointed by education to take high rank in subsequent life, rather than in measures to simply swell numbers regardless of their educational qualifications. The true measure of success with them is not the quantity but the quality of the material manufactured.

Should a literary institution be established which admitted whoever chose to apply, without an inquiry as to the moral character or preliminary education of the applicant until the completion of the prescribed course, we can have no doubt as to the rank which it would take. It might boast of well filled halls, of overflowing classes, of a long catalogue of patrons, but it would never refer to the educational character of its graduates—the real test of its merits. Such a literary college would soon become a hissing and a byword among the educated, and would speedily sink under the load of infamy which it would call down upon its devoted head by such a prostitution of its powers. It would be repudiated by every honorable and high-minded student, and its diploma would be little better than if issued by the Castle of Indolence. Its testimonial of proficiency in learning would be but a price set upon idleness, incompetency, and demerit.

While our literary institutions exhibit such commendable zeal in behalf of a high standard of education, and consider their chief excellence to rest in the character and not the number of their graduates, our institutions for medical learning pursue a diametrically opposite policy. They esteem the true measure of success to be the number of their graduates, and not the proficiency of these graduates in medical science. Their doors are not only thrown widely open and every one invited to enter, but, in some cases, their servants have been sent out into the highways and byways to compel students to come in that their lecture-rooms might be full. No test questions must be put to such guests, lest they should take it as an insult and attend a neighboring school. The only preliminary examination ever instituted, that we are aware of, was as to the *color* of the student. Some schools have not even the courage to exact the stipulated fee lest they should give offence and diminish their classes, while nearly all swell their lists with the names of many who are not full students of medicine. Under the title "beneficiaries" many colleges contrive to admit large classes who are totally unfit for the study, and much more the practice of medicine. All colleges agree in waiving an examination into the moral character and qualifications, by preliminary education, of the student, until he has completed the course of three years of study, and an attendancee upon two full courses of lectures. And what if he is then found unqualified? Ah! but who ever heard of a medical student after "three years' study and an attendance upon two full courses of lectures, the last of which was in *this institution*," who was not found qualified? It is too cruel after three years of study, and especially after having attended the last full course of lectures (and paid his fees) at "*this* institution," to tell him flatly that he is not qualified to practise medicine. And what an amount of assurance on the part of a Faculty would it not require to do their whole duty in many instances, and candidly inform the candidate that he has altogether mistaken his calling; that he was never qualified, either by natural or acquired mental force, or by early education, for the profession of medicine; that, in a word, he has wasted both time and money in his present pursuit, and must now, after fulfilling all the required terms for graduation, except passing a "satisfactory examination," give up the course of life which he and his friends had marked out for him, and seek some more congenial avocation. No Medical Faculty, however high-minded, would have the moral courage to take from a student his time, and his hard-earned fees, and then deliberately tell him the truth in regard to his qualifications. Many conscientious professors, anxious to do their duty to the profession, and yet sympathizing with the student, whose future life trembles in the balance, are annually put on the rack. With many a doubt, and much hesitation, they at last yield to the force of that policy which makes it too late to deny the student, when he is first put to the test of a rigid examination. Thus many of our best schools are betrayed into granting their diplomas to graduates who not only disgrace them, but who hang like a millstone around the neck of legitimate medicine. It is from this class that quackery, to the everlasting shame of the medical educating bodies, gains its recruits. Nor can we expect better things until a radical and complete reform is made in our system of medical education. And that reform is suggested by the practice of literary institutions of examining candidates on their first application for admission to the course of instruction. No consideration, other than the desire to do justice primarily to the student, and secondarily to the school, could then influence the judgment of the examiner. If the applicant were disqualified by want of natural abilities to acquire a proper knowledge of medicine, he would unhesitatingly inform him, and thus doubtless would persuade him to abandon a pursuit for which he was not adapted. If he were but partially qualified by preliminary education, we would advise him to establish first the basis upon which he was to build. Thus the profession would be saved the infliction of membership with the incompetent and uneducated graduates which now annually swell its ranks.

Although the institution of this reform, and its practical fulfilment, rests with the medical schools, yet the experience of the past has taught us that the impelling power is with the great body of the profession. While the false idea of merit obtains among colleges that the size, and not the educational excellence of the graduating classes, is to be regarded, no reform can be expected. The profession at large must destroy this false and pernicious system, create a new standard, and bring the schools to its test. We are glad to notice that this first step in the reform of our system of medical education is already attracting much and deserved attention. In the Medical Society of the State of New York, Prof. Howard Townsend has brought it prominently forward in an able report; in the Indiana State Medical Society it has also been urged in an elaborate report; and at the last meeting of the General Council of Medical Education, England, the report upon medical education contains, as its first proposition, the examination of students as to their having' acquired the prescribed preliminary education.

We are but too well aware that the subject of medical education is a trite and hackneyed theme. It has been discussed in all our societies, local and general, until it would seem that no new aspect of the subject could be presented; certainly until all have become thoroughly tired of listening to the reports and debates to which it invariably gives rise. Few of our readers will, we fear, even have the courage to glance down the column bearing its caption, to learn what may perchance be the particular topic discussed, and the arguments brought forward. Nevertheless, it is a subject with which no one should become weary, as it is of vital importance to his own respectability, and the social position of his profession. Certainly no one who studies to promote the best interests of that profession will ever become indifferent to the character of his associates as influenced by education. We believe, therefore, to a certain number the subject of medical education has still much interest, and that suggestions in regard to it will not fall on ears indifferent to their importance.

THE WEEK.

The appointment of quacks to the medical staff of the volunteer regiments seems to be a growing evil. From the Army of the West we learn that men are elevated to these positions who have not a shadow of qualification, and often not a diploma. This fault is chargeable on commanding officers, who disregard all forms, and select a favorite without a thought as to his fitness for the position. In this manner some of the most notorious charlatans have even found their way to the staff of the general officer. But we were not prepared to learn that the Board of Medical Examiners, at Washington, composed of some of the best officers of the regular staff, would allow a mere pretender to receive its endorsement, and be elevated to the honorable rank of Brigade Surgeon. Yet from a letter which appears in another column from Dr. Stephen Wickes, President of the Essex Co. (N. J.) Medical Society, to the Surgeon-General, such appears to be the fact. There must have been, however, some inadvertence in this action. Were not the Examiners too much influenced by private testimonials, for we understand the applicant was well fortified with certificates of medical qualification by a prominent surgeon of this city? We cannot believe that the regular staff, which has always so carefully guarded admission to its ranks as to select only those possessing the highest medical qualifications, could knowingly indorse a man as a qualified brigade surgeon who has not even a diploma. If this error has occurred we do not doubt it will be promptly corrected. We should regret exceedingly to find the name of a quack associated hereafter with the honored names of Hamilton, Blackman, Dalton, Hewitt, Bell, Lyman, Suckley, Ellsworth, Crosby, and others which make up the catalogue of Brigade Surgeons.

In the corps of Brigade Surgeons New York City is well represented. The following appointments have thus far been made:—Frank H. Hamilton, M.D., Professor in the Bellevue Hospital Medical College; John C. Dalton, M.D., Professor in the College of Physicians and Surgeons; Rufus K. Browne, M.D., Professor in the New York Medical College; Henry S. Hewitt, M.D., formerly Surgeon in the U. S. A.; George Suckley, M.D., formerly Surgeon in the U. S. A.; Wm. H. Church, M.D., Surgeon to Bellevue Hospital; Rufus H. Gilbert, M.D., late Surgeon to Col. Duryea's Regiment; John McNulty, M.D., late Surgeon to the 37th Regt. N. Y. Vols.

Referring to the clause of the new rules and regulations on Medical Education, about to go into effect in England, which provides for the preliminary examination of medical students, the *Lancet* says:—

"There can be no room for doubt as to the propriety or expediency of the proceeding. It is the beginning of an entirely new system, which must tend greatly to improve the general status of the profession. It ensures that no one shall enter the medical profession who has not had a sufficient general education, and proceeds on the sound principle that the general education must precede the professional. No one can be registered as a student of medicine who has not passed the preliminary examination, which henceforth will become what may be called the medical student's registration examination, certifying that he is ready to enter on the study of medicine. Before many years have passed, we shall wonder that the system of allowing this examination to be deferred until the time of the professional examination had been permitted to continue so long, and still more shall we wonder that any licensing body had granted its diploma without any examination whatever in general education."

At the recent meeting of the British Association for the Advancement of Science, Dr. Farr read a paper on the health of the British Army. Referring to the reforms introduced by the Commissions, and the result upon the health of the troops, he says:—

> "Under the new system an exact account is kept of the diseases of every soldier from the day he enters to the day he leaves the army or dies on the pension list; and the returns are so arranged as to exhibit the diseases of every regiment separately, as well as the amount of disability, invaliding, and death produced by each malady, and as far as possible by each conspicuous cause. The variable sanitary state of the army is thus brought clearly before the eyes of the Medical Department, the commanding officers, the Commander-in-Chief, and the Secretary of State, so that evils, instantly known, can often be suppressed as they arise. The books are now made portable, and so simplified that they will work in the field as well as in barracks. The efficiency of the army depends primarily on the health of the troops; the health being expressed by the relative numbers of sick and dying out of a given strength. The army at home consists of different arms, and, with embodied militia, its strength in 1859 was 90,753. The army consists of men in the prime of life, between the ages of 20 and 40, generally unmarried, and living hitherto in barracks. We contended that, whereas 17 in 1000 of these men at home had died annually, a body so selected, well fed, well lodged, and well handled, morally and physically—admitting only recruits satisfactory to the examining medical officer, and parting constantly with its invalids—should not experience a higher rate of mortality than that expressed by 7 in 1000; the rate of mortality actually experienced by the population at the corresponding ages in the healthy districts of England. The result was nearly achieved in the corps at home in 1859. The mortality of the Foot Guards had been 20 per 1000 (1837–46), and fell to 9; that of the infantry of the line had been 18, and fell to 8; which was also the mortality of the cavalry, the engineers, and the artillery. Some obvious sanitary arrangements were introduced; instead of being shut up in towns the men were sent to healthy camps, and the above are some of the results. The annual deaths among all arms of the service at home had been 17·5; the deaths at Shorncliffe and Aldershott in the three years 1857–58–59 were at the rate of 5 in 1000. The previous excess was referable to zymotic diseases, such as fevers, cholera, diarrhœa, and to consumption; the effects of crowding in barracks, of bad ventilation, bad water, bad drainage, badly chosen sites, bad cooking arrangements, and the absence of the means of cleanliness. A great result has been realized; in England hundreds of lives have been saved; indeed, a battalion living in arms at the end of the year 1859 would, at the previous rates, have then lain buried in their graves. Severe sickness has also decreased, and the vigor of the whole body of healthier men has, no doubt, increased in proportion."

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Board of Health, Philadelphia.—Dr. Thomas Stewartson has been appointed a member of the Board of Health, in place of Dr. Bond deceased.

Health of San Francisco.—Whole number of deaths for July, 125, of which 45 were under three years of age.

Buffalo Medical College.—The *Buffalo Med. and Surg. Jour. and Rept.* states that the President of the Navy Medical Examining Board stated to a candidate that this was "the only school from which candidates have not been rejected during the recent examination for the Government service."

Reviews.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Prof. of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; Author of "Clinical Lectures on the Diseases of Women and Children." Illustrated by Four Colored Lithographic Plates and Ninety-nine Wood Engravings. 8vo. pp. 763. New York: Samuel S. & William Wood, 389 Broadway. 1861.

(Continued from page 224.)

The remainder of the book is devoted to labor. The phenomena of natural labor and the duties of the attendant, the accidents that may complicate it, and the various circumstances that may require the intervention of art, are elaborately considered.

In natural labor either extremity of the fœtal ovoid may present. This is not a mere theoretical point, but one of practical importance. If presentations of the pelvic extremity are to be regarded as natural, then it follows that they should, equally with head presentations, be intrusted to nature, until her incompetency to achieve delivery with safety either to mother or child is demonstrated.

This classification of our author, though differing from that of some modern authorities, is in our opinion correct. Equally so is his estimate of presentations of the face as natural. These varieties of natural presentation are considered previous to the description of the phenomena of natural labors. There are certain points of interest connected with face and breech presentations, upon which we had designed to comment, but must pass by for want of space.

In the twenty-fifth lecture our author introduces the young practitioner into the lying-in chamber, and initiates him into the mysteries of his duties there. Punctuality and promptness in responding to the call are insisted on. Having gathered important information from the nurse, he is at length ushered into the presence of his patient.

> "You approach her gently and courteously, and, * * * enter into conversation with her, talking of any and everything except of the subject directly connected with the object of your visit."

After a suitable time has elapsed, a vaginal examination is proposed through the medium of the nurse. "While the nurse is arranging the patient, you will generally be requested for the time being, to walk into an adjoining room; but if not, be careful that you occupy yourself with something else than gazing at the movements of the parties; take a seat, and turn your back; become thoughtful, as if lost in the solution of some great professional problem; or, if a book be at hand, open it, and improve your mind." A most important suggestion follows. When about to address himself to such an examination, the accoucheur is to call to mind that he desires by it to learn—

> "1. Is she pregnant? 2. Is she actually in labor, and has the os uteri begun to dilate? 3. Are the pelvis and soft parts in a normal condition, or are they deformed? 4. Is the presentation of the fœtus in accordance with the requirements of natural labor?"

The importance of each of these inquiries is forcibly illustrated by cases and arguments.

The phenomena of the three stages of labor are now described, and the conduct of the practitioner and the management of the patient under each. In this connexion our author enunciates an axiom which may be unhesitatingly accepted, viz.—"*You should, as a general rule, regard quick births as dangerous.*"

A lesson of great importance is enjoined upon the young practitioner, which he should carry in mind through life; "the moment the child is in the world, place your hand gently upon the hypogastric region of your patient, for the purpose of being assured that the uterus responds to the birth." A general observance of this rule would without question greatly diminish the frequency of post-partum uterine hemorrhages.

All the duties of the accoucheur in the third stage of labor are described, and attention particularly called to the removal of coagula from the vagina and mouth of the womb, *immediately* upon the expulsion or the withdrawal of the placenta. The latter we believe to be a precaution seldom observed, and yet inferior in importance to no other, as a means of preventing the irregular contractions so often productive of frequent and harassing after pains. Excellent figures illustrate the introduction of the hand to overcome spasm and to remove the placenta.

The lecture upon the duties and conduct of the accoucheur will be read with delight by the student, and with profit by the experienced. It cannot be too highly commended.

Lecture twenty-seven is devoted to the consideration of uterine hemorrhage. Our author introduces the consideration of this all-important subject by a graphic portrayal of the scene in the lying-in chamber upon the occurrence of alarming hemorrhage after the birth of the child.

The picture of the miserable inefficiency of him who under such circumstances is overcome by his fears, though painful, is but "too faithful a daguerreotype of many a sad scene in which the heartstrings of affection have been broken, and the domestic hearth converted into a domicile of unutterable grief." That the practitioner may avoid the liability to such sad disaster, the expedient of immediately placing the hand upon the uterus after the expulsion of the child is again urged.

In the treatment of uterine hemorrhage, the one object to be accomplished is to make the uterus contract for the purpose of closing the mouths of the exposed bloodvessels. The use of the tampon is most properly regarded as absurd and dangerous. Pressure and cold are the reliable remedies.

The placenta is to be removed so soon as the uterus has cast it from its surface, and pieces of ice may be advantageously introduced for the purpose of exciting contractions. Ice water into the stomach contributes materially to this result. Dr. Bedford regards compression of the aorta, which has been generally disregarded, as a "sovereign remedy," "not merely, as is generally supposed, because there is no more blood reaching the uterus, but for another reason which has been demonstrated by the experiments of Dr. E. Brown-Séquard, that there is no more certain mode of producing contraction of the womb than by the arrest of the arterial circulation." Injections of cold water into the uterus, as well as the introduction of pieces of ice, have been discountenanced by some as liable to produce metritis. The authority of Scanzoni is quoted in favor of the first of these expedients, while our author regards as unjustifiable and dangerous all stimulating and irritating injections.

To overcome the exhaustion induced by loss of blood, "the various stimulants are to be employed—brandy, milk punch, strong coffee with laudanum, etc., but a due degree of care is to be exercised in their administration, for remember, after a momentary revival, the patient is again apt to fall into collapse. It is as it were, but the last flickering of the light in the socket, there is but one spark left, and if it be too rudely blown it brightens for the instant only to become for ever extinct." The insidious nature of internal hemorrhage is truthfully represented and illustrated by a most instructive case in our author's experience.

The researches of Brown-Séquard, and the labors of Martin of Berlin, have quite recently revived attention to an expedient long since fallen into disuse, viz. the transfusion of blood into the veins. Within the past year, Martin has published an essay, in which it is stated that there are fifty-eight known cases in which this operation has been resorted to, and that in forty-six cases the result was complete recovery, though the exhaustion had been so extreme as to inspire no hope whatever of success. These researches are quoted by our author, and also the researches of Brown-Séquard, which have led that eminent physiologist to the conclusion that the blood of inferior animals, as of dogs and cats, can be substituted for human blood, and that defibrinated blood is equally successful with that freshly drawn. This author's directions for injecting the veins are quoted by Dr. B., but we do not understand him as expressing an opinion upon the merits of the recommendation.

Lecture twenty-eight contains the fullest directions for the Management of the Puerperal Woman and her Infant during the month, and they embrace every topic that can interest the young practitioner.

It is unnecessary to enumerate the familiar topics discussed in this chapter; few subjects are more intimately connected with the success of the young physician. The "running schedule" of inquiries that ought to suggest themselves to the practitioner at his first visit after the delivery of his patient, embraces every point upon which he should inform himself; the analysis of individual symptoms, especially of pains, will serve to direct his treatment. Excellent directions follow as to feeding the infant and treatment of its disorders. An interesting account will be found of milk in the breasts of new-born infants, as also of sore nipples and mammary abscess in the mother.

The subject of the Inversion of the Uterus is inferior in interest to the practitioner of midwifery to no other, since of all the accidents that may occur in the lying-in chamber, this has most frequently served as the basis for suits for malpractice. The question of chief importance is, can this accident occur spontaneously, or does the fact of its occurrence imply neglect or malfeasance on the part of the practitioner? On this point our author says:—

> "I think, however, the fact must be conceded that, in the great majority of instances, this form of uterine displacement is due manifestly either to carelessness or gross ignorance on the part of the accoucheur; as an evidence of the truth of this opinion, you will observe that, in well-regulated lying-in hospitals, inversion of the uterus is among the very rare complications of labor. It is an interesting circumstance to record that, in 71,000 cases of delivery, which occurred in the Dublin Lying-in Hospital, there was not a solitary example of inversion. We, therefore, are to look for this accident principally among the records of private practice."

And again:—

> ' Inversion is occasionally spontaneous, and this would be more likely to occur in women who have borne many children, in whom the muscular parietes of the uterus are very much relaxed, and the labor rapid."

The views here presented of this subject he believes to be essentially just and supported by experience. While no mantle should be woven to screen the careless practitioner from the proper consequences of his misdeeds, it is due to the professional brother to whom this accident may have occurred without fault of his own, that it should be understood that this accident may in some cases have a strictly spontaneous origin. It is impossible to ignore the testimony of some conscientious reporters, that inversion of the uterus has occurred to them, after the expulsion of the child, without the least traction having been made upon the cord. Dr. Channing even reports a case (*Boston Med. and Surg. Journ.*, vol. xl. p. 231), in which the child and afterbirth were rapidly expelled, and the womb inverted, all by the same continued effort. To the direction given by our author, that the hand should be instantly placed over the uterus, upon the expulsion of the child, with a view of ascertaining if it be contracted, it should be added—*and to learn if it be contracted uniformly and not depressed inward at the fundus.* Such dimpling probably precedes every act of inversion of the womb, and may be caused, as we have reason to believe, by irregular action of the muscular fibres —though this opinion, we are aware, is not adopted by all. Such depression of the fundus, if recognised, would put the attendant upon his guard. On page 448 we find attention called to this point.

In lecture thirty-one, certain accidents are considered, which may render manual delivery necessary.

In prolapsus of the funis our author advises that attempts be made to replace the funis, in accordance with the practice of the Lying-in Hospital of Vienna, in which, of forty-three cases of the accident thirty-eight children were born alive. He also describes the now well known "postural treatment," of Dr. T. G. Thomas, of this city, which promises a large degree of success.

Considerable space is devoted by our author to the subject of Unavoidable Hemorrhage, or that arising from Placenta Prævia. Ample directions are given for the management of the patient in those frequently recurring hemorrhages to which the woman is under such circumstances liable.

We conceive that in the present state of our experience, our author is fully justified in regarding version to be "the cardinal remedy," in placenta prævia, when the head is at the superior strait, and forceps when it has descended into the pelvic excavation. It is true, that the claims of the tampon, rupture of the membranes, employment of ergot, etc., separately and collectively, have been urged as capable, in many cases, of preventing the necessity of version. If the views of Barnes in relation to the line of spontaneous cessation of hemorrhage be eventually proved to be correct, additional ground will be furnished for delay while these expedients may be tried. If it be true that in every case, sooner or later, such a line of separation is reached, that no further hemorrhage is possible, it will be manifestly the duty of the accoucheur to disregard the "cardinal rule" so long as it may seem to him safe to do so, and wait for a natural delivery, thereby greatly increasing the chances of safety to the child.

The merits of Dr. Simpson's plan for artificial detachment of the placenta are now well understood. Nobody now regards it as intended as a substitute for version. We presume there are few who question that Dr. Simpson assigned to the separated surface of the placenta much too large a share in the production of hemorrhage. Our author very properly regards contractions of the uterus the great hæmostatic agent in uterine hemorrhages. In arguing against the probabilities of the success of this expedient, our author inquires: "But suppose the accoucheur, after the birth of the child, should attempt, by *premature* and *forced tractions* on the *umbilical* cord, to hurry the operations of nature, and thereby cause an artificial detachment; would there not, as a necessary consequence, in ninety-five cases out of one hundred, be more or less profuse bleeding?" We answer, most certainly—and more than that, the successive detachments of portions of the placenta, as the os uteri dilates, may be likened in their effects to "the premature and forced tractions" of the cord; and experience proves that in both instances, regular, uniform contraction of the exposed surfaces is secured by the removal of the entire placenta, and consequent cessation of hemorrhage. To be just, however, our author does not depend upon argument as a proper reply to the inquiry as to the success of artificial separation of the placenta. He quotes the fullest and most recent statistics upon this point, which prove beyond question, that to whatever conclusion arguments may lead, the fact is undeniable, that *cessation of hemorrhage may be confidently expected* immediately or very soon after the artificial separation of the organ.

In no particular is the indebtedness of practical medicine to physiology more strongly marked than in the instance of puerperal convulsions. While this disorder was once supposed to depend upon changes in the circulation alone, we now know the causes are various in their origin, and that they may be grouped under the two heads, 1st. Eccentric or external, and 2d. Centric or internal. In Lecture thirty-two our author considers the former of these two classes, their symptoms and treatment. Among the *reflex* causes of convulsions, indigestible food in the stomach stands prominent; this is illustrated by our author in an interesting case. Intestinal irritation may produce a similar effect. A very instructive case, occurring to our author, serves to illustrate the influence of vesical irritation, convulsions having apparently been induced by the strangury caused by the absorption of cantharides from a blister.

From the recognition made by our author of the various sources of convulsions, his denunciation of routinism in treatment naturally arises. The dangers arising from persistence in venesection, and from the use of opium without proper regard for its indications, are dwelt upon at length. Of the importance of an early and free evacuation of the bowels in the convulsions occurring during labor, at least, there can be no doubt. We have seen cases in which venesection and the free use of chloroform failed to arrest the convulsions, yield upon the operation of a cathartic. Dr. Bedford recommends etherization, with the proviso that in all cases of plethora the circulation shall be first equalized by the use of the lancet.

In case of the occurrence of convulsions previous to the dilatation of the os uteri, our author remarks: "I know of no remedy equal to the belladonna, for I am quite satisfied that it possesses two important attributes, one of which, at least, has, perhaps, not been sufficiently appreciated in the practice of midwifery. These attributes are *the lulling of uterine contraction, and the promotion of dilatation of the mouth of the organ.*" He recommends its employment in the form of ʒ i of the extract to ℥ i of cerate. Dr. Bedford speaks of the results obtained, in the most positive and unequivocal manner.

The thirty-third lecture is devoted to an elaborate discussion of the connexion between albuminuria and puerperal convulsions. Our author's remarks upon this interesting subject will well repay perusal.

The great feature of this book is the portion assigned to Manual and Instrumental Delivery. We have dwelt so long upon the subjects already noticed, that we cannot do justice to the remainder in the space allotted. Some idea may be formed of the extent of discussion and the minuteness of detail, by the fact that four lectures are devoted to manual delivery alone. In the thirty-fourth lecture he considers the various circumstances that may demand the assistance of the hand, embracing the correction of unfavorable positions of the head. The mode of performing podalic version under various positions of the vertex is first described. The account of cephalic version, so long rejected from practice, but recently revived, and especially Dr. Wright's improved directions for its performance and the success attending it, will serve to call the attention of practitioners in this country to an expedient which ought, under certain circumstances, to be preferred to any other.

The practice of performing cephalic version by external manipulation has for some time been largely adopted in Germany, and its claims recognised in other countries on the continent. Circumstances have arisen in this country within the last two years, which have served to bring a knowledge of it for the first time to many of our physicians. As we might expect, from the strictly conservative character of our author's teachings, he discountenances a resort to this operation during the latter months of pregnancy, for the very good reason that statistics prove the strong probability that a transverse presentation detected during gestation will be spontaneously converted into a head presentation by the end of the ninth month.

The propriety of version in pelvic deformities is considered by our author. It was resorted to by Denman and others of his time, but fell into disuse in England. For some years past it has been resorted to in Germany, and has recently been revived in Great Britain. The considerations presented by Dr. Simpson in its favor are quite familiar to the well-read physician. Our author considers that if the antero-posterior diameter of the brim be less than three and one-eighth inches, delivery by version would be impossible; and that in lesser degrees of contraction, it is safer to trust to the moulding influence of continued contractions to enable the head to descend, the forceps being resorted to, so soon as the incompetency of nature is declared. Turning, says our author, "under the most favorable circumstances, is *an operation of peril both for mother and child;* and just in proportion as the natural dimensions of the pelvic canal are abridged, the peril will be enhanced; and, although, as a general rule, when the head is still at the superior strait, I prefer turning to forceps delivery, yet, in the event of a pelvic deformity, such as we have been considering, my choice would be the instrument."

The mode of effecting artificial delivery when required in cases of pelvic presentations, is next considered, followed by a lecture upon the management of transverse presentations under the various positions of the trunk, and with the different complications that are more usually associated with them.

In describing spontaneous evolution, our author states that Douglas has shown that Denman's explanation was erroneous. It would have been more strictly correct to have stated that besides the spontaneous evolution of Denman, Douglas and others have recorded cases of spontaneous version, in which the shoulder is expelled first, and while it presses against the arch of the pubes the chest and breech are successively forced down. Dr. B. states, as evidence of its rarity, that he has never met with an instance of such spontaneous change, and properly cautions the student against expecting such a termination of labor.

The three following lectures are devoted to forceps delivery, and we speak advisedly when we say, that nowhere in the whole range of obstetrical literature, so far as we have read, is this subject treated in greater detail, and certainly not with a more careful appreciation of what is to be reasonably expected from the use of this instrument, and of the conditions under which its employment is justifiable.

Dr. Bedford comments with deserved severity upon the too frequent and unnecessary resort to instrumental delivery, and of the "practice of certain medical gentlemen, who speak of their almost daily use of the vectis, forceps, or crotchet, precisely as if a man's skill in the lying-in room is to be measured by the frequency with which he resorts to instruments! I believe in the converse of this proposition; to my mind, the truly skilful accoucheur rarely (comparatively, at least) employs instruments," because he well knows that "nature is generally adequate to the proper accomplishment of her work."

He remarks, "the obstetric arsenal, so far as the number and kind of forceps are concerned, is not only a vast armory, but has really become an institution in itself; and, indeed, it may be asked, with some degree of propriety, whether the interests of humanity would not have been more wisely served, if some of the time employed in the construction and modification of this instrument, had been given to the proper consideration of the more important question—*Under what circumstances, and in what manner is the Forceps to be Employed?*"

Dr. Bedford dissents from the restricted view, which in the judgment of Dr. Meigs and others would lead us to regard it as "the child's instrument." Repeated aggravated instances of malpractice in attempts at artificial delivery having come under our author's observation, he is unsparing in his rebuke of "those practitioners who destroy their patients by the rude and unjustifiable use of instruments;" and strongly intimates that "the good derived from the forceps has been more than counterbalanced by the evil it has inflicted." This is a fearful question; and when we consider the accidents which occur in the use of forceps, to physicians of unquestioned intelligence, and even accomplished in practical surgery, but unused to the intrument in question, one of little experience may well hesitate before resorting to its employment.

"What is the true power of the forceps?" Some rely much upon its ability to diminish the diameters of the head by compression. Dr. B. admits its power to do this within limits not exceeding three or four lines, without endangering the child. The true office of the forceps our author regards to be that of a *tractor;* "*the forceps as a tractor becomes, as it were, a substitute for the uterine contraction necessary to expel the child. Therefore, in all particulars, it should be made as rigidly as possible to simulate, through extractive force, the uterus as an expulsor.*"

The sources of danger to mother and child are alluded to. We cannot forbear to ask why do lacerations of the vagina or bladder occur in the practice of intelligent men, as we *know* they do happen? We do not believe that they are caused by violent introduction of the instrument, but in consequence of imperfect seizure of the head, and unskilful management in delivery. If the handles be too much elevated, the extremities of the blades may lacerate the vagina posteriorly or even the rectum, and if too much depressed, the bladder may be ruptured. In conducting delivery the practitioner ought ever to be guided by the consideration that "*the forceps being a substitute for the natural forces, should, in every particular, be made to imitate as far as may be these very forces.*" The forceps represented on page 579 are well known to the profession of this country, and have already received "that degree of favor" to which a "fair trial" entitles them.

The conditions calling for the use of forceps are next considered. If the antero-posterior diameter of the brim at the transverse diameter of the outlet be less than three and one-eighth inches, he considers that a living child cannot be delivered.

Dr. Bedford exposes the error of certain of the older English obstetricians, whose rules for the determination of the proper time of delivery were based upon the ability to recognise the ear, and upon the fact that the head had remained without advance for six hours. These rules were doubtless designed to counteract a tendency to the unnecessary resort to the instrument. It would be doing injustice to English authorities of the present day to represent them as adopting these arbitrary directions. We believe that for the most part they would assent to the language of our author, who declares that the proper time is "a question of evidence;" the problem to be solved is, "can nature accomplish the delivery consistently with the safety of parent and child, or will the interposition of science [art?] be needed?" "*Nec temere nec timide,*" should be the maxim; better "*that the instrument should be employed five minutes too early than five minutes too late.*"

Certain obstetricians of the present day seem to take pride in displaying their disregard of long-settled rules of practice. Among these the requirement that the os uteri should be dilated previously to the use of forceps, is professed to be disregarded. Our author expresses his opinion most emphatically, that "to attempt to introduce the blades of the forceps into an undilated os," would be "the probable passport to the death of the patient."

The mode of introducing the forceps is most clearly described and illustrated by several figures. The "rules" for introduction are very explicit, and, as our author remarks, "there is not a direction inculcated which will not be of value to the practitioner." The difficulties do not terminate with the introduction of the instrument.

> "Those of you, who have never witnessed a case of forceps application, will be amazed to learn the amount of force sometimes required to achieve the delivery; the strongest arms will occasionally be found almost surrendering to the needed effort; and yet all this force, if it only be tempered with judgment, is not only justifiable, but will be quite consistent with the safety of mother and child."

A slight oversight occurs on p. 595 in describing the introduction of the forceps, when the vertex is at the left acetabulum—it is plain that the male must be passed *under* the female blade or the blades crossed.

Our author takes frequent occasion to inculcate the precept that in the choice of modes of delivery, *version* is to be preferred so long as the head is at the *superior strait* or still within the os uteri, and the *forceps*, whenever the *head* *has passed from the os uteri*, and is in the cavity of the pelvis. In cases of moderate contraction of the brim, and in some instances of detention of the head at the superior strait by other causes, our author would resort to the forceps, provided the diameter is not less than three and a quarter inches. He pronounces this "one of the most difficult operations in obstetric surgery." It would be interesting to know the relative mortality to the child of this operation, and of version.

The accoucheur will be occasionally called upon to assist the delivery of the head by forceps, when the feet have been delivered first. Our author expresses the belief that one will almost always succeed in delivering the head by manual operation; and has met with but two cases in which he was obliged to resort to forceps, in both of which there was disproportion between the head and the pelvis. He states that "appalling results occasionally ensue from the rude and unskilful attempt to extract the head by manipulation," but they are concealed from public knowledge, through the privacy of the lying-in-chamber, the friends believing "all was done that could be done." Manipulations under such circumstances are often very difficult, and if the head has passed for the greater part beyond the uterus and closely fits the pelvic cavity, it seems to us that the use of forceps increases the chances of saving the child: but this will depend very much upon the skill of the accoucheur in accomplishing their introduction. We cannot dwell upon the use of the forceps in face presentations.

Lecture forty-one introduces the consideration of delivery by cutting instruments. What is the highest contraction of the pelvis consistent with the birth of a living child? Our author quotes the different estimates of authors, from 2 inches up to 3¼ inches. Dr. Bedford's estimate, as we have before seen, is 3⅛ inches. The highest degree of contraction allowing delivery by piecemeal, is also variously estimated from 1 to 2 inches. From repeated experiments Dr. B. would assign 2⅛ inches as the limit, unless the child be dead. Now between 3⅛ inches, the limit of the birth of a living child, and 2⅛, the limit of safe embryotomy, what shall be done if the child be living and at full term? This, as we have seem, will include cases of not very infrequent occurrence. Symphyseotomy, of which a very interesting history is given, being properly rejected, shall the child have the chances afforded by the Cæsarean section?

It is most gratifying to see that modern obstetrical science is devoting special consideration to the means by which the loss of fœtal life may be diminished. Dr. Tyler Smith has taken a leading position in this advance, and expresses a hope in the eventual abolition of craniotomy from the practice of midwifery. This result, of course, can be attained only by a more general resort to the induction of premature labor, version (?) and the Cæsarean section, in cases to which they may be severally adapted.

It is but justice to our author to state, that the tendency of his instructions for the last twenty years has been in the same direction. That he has uniformly denounced the resort to craniotomy under circumstances in which it is very often practised, all who have heard him well know; and he has been, so far as we are informed, alone in the position that the Cæsarean section should be resorted to between 3⅛ in the limits of living birth, and 2⅛ in the limit of safe embryotomy. For the purpose of comparison, we here state, that Tyler Smith, in his Lectures, considers that the forceps are generally inadmissible in diameters below 3¼ inches; that turning may be practicable between 3¼ inches and 2¼ inches; the Cæsarean section comes into the field in high distortions of 1½ or 2 inches or less; and between the point at which turning is impracticable, and Cæsarean section indispensable, lies the domain of craniotomy.

This opens at once to us the question of the relative dangers of the Cæsarean section and of embryotomy. On this point we should be pleased to dwell a while; though unable now to shed upon it any new light, we think the source of fallacy in the reasoning of writers is plain. By quotations, our author shows the differences of opinion that exist as to the value of the Cæsarean section. There can be no doubt that much of the difference between English and Continental authorities is based upon religious grounds. Dr. B. quotes Churchill's latest statistics, that give the mortality after embryotomy as 1 in 5. Of 49 cases of embryotomy in the Dublin Lying-in Hospital 16 died, or about 1 in 3. The mortality to mothers in the Cæsarean section is estimated at 1 in 2½, and to the child 1 in 3⅛. Our author admits that, as compared with craniotomy, the maternal mortality of the abdominal section is the greater, but, he argues, "in the practice of Dr. Clarke, a practitioner of sound judgment and ripe experience, in 49 cases there was the dreadful sacrifice of 65 lives, supposing the children to have been alive at the time of the operation!"

If we are to estimate the trophies of the Cæsarean section, in comparison with those of Craniotomy, by the aggregate of the lives of the children and mothers, the Cæsarean section may result in the preservation, numerically, of a greater number of lives. Here we are brought directly to the relative value attached to the life of the unborn child, in Catholic and Protestant countries. It appears clear to us that the materials do not yet exist, or at any rate have never been properly presented, for a comparison of results between these two expedients. Our author very properly dwells upon the fact that Hysterotomy has been often performed in hopeless cases, and not in accordance with the advice of writers who lived nearly 300 years ago, who urged that "*the Cæsarean operation should be performed before the rude manipulations of the accoucheur had injured, and more or less exhausted the woman.*" Hence the statistics we now possess, doubtless exhibit a rate of mortality considerably higher than is fairly due to the operation itself. Much also may be expected from the use of anæsthetics. But on the other hand we must remember, that the mortality assigned to craniotomy is enormous, if we regard the deaths as in any way connected with delivery. We know that such statistics are composed of cases in which it was resorted to on account of convulsions, hæmorrhage, rupture of the womb, and other accidents. Does any one believe that one out of every five dies from the immediate effects of craniotomy? or at any rate that this need be so, if it be performed with any decent regard for the safety of the mother? But we do not find it equally easy to dissociate the death of the patient from the abdominal incision, no matter how favorable may be the circumstances of its performance. We would not discourage a resort to Cæsarean section in cases to which it is adapted; but it is essential that we should understand plainly, whether it be resorted to because the mortality to the *mother* is less than that of Craniotomy, or because we attach to the life of the unborn fœtus a value that shall warrant the mother incurring very imminent risks to herself. On this point our author speaks plainly, and declares, that "*if the child be alive, the woman at the completion of her pregnancy, and it be made manifest that the maternal passages are so contracted as to render it physically impossible that a living child can be extracted per vias naturales, I should between the two resources—craniotomy and the Cæsarean section—not hesitate to decide in favor of the latter.*"

In taking this ground, our author is aware that he "is at variance with the general views of the profession on this subject." This is certainly true. The fact that, in his own extended experience, he does not appear to have an opportunity of illustrating his views in his own practice, certainly justifies his reputation for the adroit and successful use of the forceps in difficult labors. Statistics of a really reliable character may eventually show, that the danger to the mother from craniotomy, when the diameter but little exceeds two inches, approaches that of the Cæsarean section; but the same can hardly ever be proved to be true when the diameter approaches three inches. Furthermore, it is between the limits of three and a quarter and two and a half inches, that turning has been recommended, and is extensively resorted to on the continent of Europe. The perils incurred by mother and child in this operation will be thoroughly canvassed, before the warmest advocates for the preservation of the child will make choice of hysterotomy, in the class of cases here referred to. Our author, as we have seen, would not resort to version under such circumstances, believing it to be very hazardous to mother and child; for, if we take even the gross estimate of the mortality to the child of version, as given by Churchill, it is a little over one in three. In the cases we are now considering, however, the pelvis being seriously diminished in capacity, the chances to the child doubtless are less than this estimate. Even then, so far as the child is concerned, as compared with craniotomy, version manifestly must have the advantage.

Rejecting version as unavailable, Dr. Bedford's choice would be between craniotomy and hysterotomy, in which case he would not hesitate to elect the latter; believing that an early resort to the operation, under the use of anæsthetics, would so far diminish its perils as to warrant the mother in taking the risk that she may afford a chance of life to her child. But it must be remembered, that the mortality to the child even in this operation is very great, viz. one in three and a half.

The whole subject of hysterotomy is presented by Dr. Bedford with great ability, especially in connexion with embryotomy, to which the next lecture is devoted. His views cannot fail to command attention, but we do not feel that in the present state of our knowledge we are justified in adopting them in all their breadth.

His denunciations of a frequent resort to craniotomy must meet the hearty accordance of the practitioner of enlightened judgment. The lecture on the induction of premature labor is very complete, and is full of interest. A succinct history of the principal doctrines regarding puerperal fever, with judicious directions for its treatment, occupies the forty-fourth lecture. The volume concludes by a lecture on anæsthetics.

We have now completed the promised survey of this book. In the Preface our author states:—

> "I have endeavored to present to the profession a practical book, one which will develop the phenomena of parturition in their various phases as they occur in the lying-in room" * * *
>
> "The arrangement of the work is rigidly systematic." * * *
>
> "I have had in view the wants of the obstetric student; and I have endeavored to aggregate facts, and dispense as far as possible with theoretical discussions. Throughout the work I have maintained strictly a conservative midwifery." * * *
>
> "It has also been my endeavor to inculcate upon the accoucheur a due reverence for the resources of nature, so that he may not thoughtlessly lapse into that too common error—'Meddlesome Midwifery.' Among other things, it has been my special aim to bring the work fully up to the existing state of Obstetric Science in all its varied relations."

We are happy to record our opinion that, in the endeavors here expressed, our author has been eminently successful.

The tone of the book is calculated to inspire the obstetrical student with enthusiasm in his pursuits, as well as with a chivalrous respect for the sex to whose sufferings he is to minister. As already intimated, the practical character of the book is one of its prominent features; and on the few occasions in which the author indulges in theory, the practical view of his subject is not for a moment lost sight of.

The volume bears, to the careful reader, internal evidence of great labor. That no pains have been spared to present everything deemed worthy of attention is evidenced by the list of authorities consulted; and yet it is in no sense a compilation, as this formidable list might lead one to suspect. It contains the substance of Dr. Bedford's teachings for a long series of years, enriched by the contributions of fellow laborers. The design then, in this respect, is perfect, and its satisfactory completion will be a source of congratulation to the author. The volume is illustrated by figures selected for the most part from the best authorities, and on all practical subjects these are abundantly copious. The four admirable plates of the changes in the areola by Montgomery, are reproduced with fidelity.

We hope, in the next edition, to see the subject of reproduction, so well treated in the text, illustrated also by suitable figures. These are indispensable to the student.

For the most part, our author has succeeded in curtailing the redundancy of expression, almost necessarily incident to the lecture room, produced by anxiety to simplify a subject; but he has not been in this respect uniformly successful. His just indignation against the malpractice of pretenders, of which many examples have come under his observation, especially leads him, in certain instances, into a style of narrative too dramatic for the taste of some readers. A copious Table of Contents precedes the first chapter, besides which, a most elaborate alphabetical Index enriches the book. The paper and typography are of the best quality.

In conclusion, we shall have greatly misjudged if this book does not prove an eminent success. Notwithstanding the form of "lectures," the arrangement is rigidly systematic, and therefore well suited for the purposes of a text-book. That it will not only be extensively adopted as such, but held in high esteem by the large class of practitioners who no longer regard works of foreign production as necessarily superior to those of American origin, we have every reason to believe.

James D. Trask, M.D.

Correspondence.

EXPERIMENTS WITH KEROSOELENE.

[To the Editor of the American Medical Times.]

Sir:—Noticing an article in the Medical Times, of Aug. 10, describing a new drug for producing anæsthesia, I sent for a quantity and have been experimenting with it a little. Perhaps my experience in its use may be of benefit to others who may wish to investigate its effects as an anæsthetic. I have taken it to the point of entire insensibility to external impressions and have given it to several others. A sort of numbness is at first felt, and anæsthesia to pricks and pinches occurs long before the person is insensible.

In the cases that I have given it, it has not produced a *sleep* as occurs from the use of chloroform, but a kind of trance in which the mind is still active. No bad effects have remained after its use—no headache, fulness over the eyes, or sickness at the stomach. It does not seem to produce any exhilaration, but acts purely as a sedative. The pulse in one or two instances was somewhat accelerated.

I also gave it twice to a cat. The first time I inserted her head into a boot, having first saturated a piece of cotton with the kerosoelene and placed it in the bottom. She soon became entirely insensible, and remained so for some time; she lay quiet and breathed natural. The next time I gave it, about a week afterwards, I had produced perfect anæsthesia by holding the cotton to her nose, and was just ready to perform a surgical operation upon her, when, without any premonitory symptoms, she straightened out in a kind of convulsion, and giving three terrible groans, died.

Yours, &c.,

Geo. P. Cady, M.D.

Nichols, Tioga Co., N. Y., Sept. 28, 1861.

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BREAKING OF A CATHETER IN THE URETHRA.

[To the Editor of the American Medical Times.]

Sir:—As I have barely escaped a serious accident from an imperfect catheter, I wish to call the attention of the Profession to the subject. In order to enforce the point, I will give a synopsis of the case.

Case.—I. F., aged 50, has for years been afflicted with dysuria, attended with inability to retain his urine over an hour or two. About fifteen months since, this difficulty resulted in complete retention, which was relieved by the use of the catheter, which, on account of his distance from the physician, was left in the bladder for a few hours, so that he could remove the plug when he felt the necessity, and relieve himself. After pursuing this course for about two weeks, he regained the power to void his urine, but was still able to retain it only a short time. He neglected to use means for a radical cure, and finally, on the 9th of August, 1861, he altogether lost the power to pass the urine. He introduced the catheter once himself, failed on another attempt, and sent for medical assistance. There was some difficulty in the introduction of a metallic instrument, and a total inability to retain it in the bladder, so that it became necessary to use the elastic instrument, which could be retained some eighteen hours without irritation. At about that time the instrument would become coated and softened so as to necessitate the use of a new one. On the 16th of August, about 11 A.M., I introduced a new instrument, which, to external appearance, was as good as any before employed. In order to give the urethra rest from the pressure of the catheter, I visited him twice a day, with directions to remove it a few hours before my arrival. About 3 P.M., on his attempting to withdraw it, it parted about three inches from and within the orifice of the urethra. On learning the fact, I went to his house, taking what instruments I had, and succeeded without much difficulty, by the aid of a pair of long forceps, belonging to my pocket-case, in withdrawing the fragment, which, with the portion before broken off, was very brittle, and would snap asunder on an attempt to bend it. The coating on the article was smooth, and to external appearance perfect, but there was no tenacity, and apparently no fibrous texture. I cannot say what was deficient in the manufacture of the instrument, but, from appearance, it might have been burned. Can it be possible that the action of the urine should have produced the change? Certainly none others purchased at the same time, and apparently similar, were changed in the same manner. They would become soft and roughened. Whatever rendered it thus imperfect, it was a dangerous article, and, if the fracture had occurred a few inches lower, it would have necessitated an operation, which, if not difficult, would, in his condition, have caused future embarrassment, if not serious trouble.

I submit this, hoping it may direct the attention of surgeons, if not manufacturers, to the subject, and thereby prevent accidents. Yours, etc.

E. S. LYMAN, M.D.

SHERBURN, New York, *Sept.* 27, 1861.

Army Medical Intelligence.

ASSISTANT SURGEONS U. S. NAVY.—The following are the names of Assistant Surgeons U. S. Navy, who have recently passed the Board of Naval Medical Examiners, now in session at U. S. Naval Hospital, Brooklyn:—Adolph A. Hockling, Penn.; Heber Smith, N. Y.; Stephen I. Clark, N. Y.; Lewis Zinzin, N. Y.; Josiah H. Gunning, N. Y.; Edward Kershner, Md.; John W. Bragg, Mass.; Charles H. Perry, R. I.; George R. Brush, N. Y.; Joseph Hugg, N. J.; T. B. Adams Lewis, N. Y.; Samuel R. Foreman, N. J.; Watson C. Hull, N. Y.; Daniel Moore Skinner, N. J.; George I. Shipley, Mass.; Charles Ellery Steadman, Mass.; Wm. Borrow Mann, N. Y.; Isaac H. Hazelton, N. Hampshire; Edw. Duggan Payne, Penn.; Benj. H. Kidder, Mass.; David F. Rickets, Md. The names are given in the order of reporting, and with no reference to relative merit.

MEDICAL NOTES FROM THE ARMY OF WESTERN VIRGINIA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—At this extraordinary period in our national history, anything from the medical department of our army, relating to the character of its duties, to the difficulties or facilities for discharging them; anything descriptive of its diseases or of peculiarity of wounds received in the field of battle; anything about the treatment of the one or the other, coming from our patriotic band of surgeons, deserves a place in our country's medical record, and will, doubtless, be read with interest by us all. Even casual incidents of camp life and warfare are by no means uninteresting, and will perhaps not be unwelcome occupants of the pages of a medical journal.

With these views, I send you the following extracts from a letter just received from Elkwater, headquarters of Gen. Reynolds's division of the Army of Western Virginia, bearing date of Sept. 14, 1861. The letter is from an old and highly esteemed friend, who, some months ago, at great pecuniary sacrifice, joined one of the Ohio regiments as Surgeon, and has been since in constant active service all over Western Virginia.

His very extended public and private practice for the past twelve years in this city and elsewhere, and his position as public teacher of medicine for some years past, lend peculiar attraction to what he may say of his experience in military medical matters.

Of camp life he says: "We live in tents which are comfortable enough in their way, but not equal at all to houses. The nights are excessively cold, and the days equally hot in such housing. Of course in the field our hospital accommodations are poor, having to use large tents for our shelter, but we get on with them very well. We establish post hospitals in all the villages, wherein our men are well provided for, and consequently the treatment there, being under more favorable circumstances, is followed by more satisfactory results.

"Our medical staff, with few exceptions, are first rate men, and good soldiers. They never flinch from a march at 'double quick' nor any other duty, and are allowed to have pretty much their own way in all that pertains to their department. We, however, cannot prevail upon the Colonels to keep their men clean or their camps in proper condition. A camp of volunteers out here at the end of three weeks, is the filthiest thing imaginable. We perhaps, as a consequence, have typhoid fever and camp dysentery." "By the way, I have had very decided success in the treatment of both this dysentery and diarrhœa with the employment of Rochelle salts purgatives."

Of wounds he says: "Since the commencement of my military career, I have probably personally attended 250 wounded men, and my experience thus far leads me to the following conclusions:

"First, wounds from small rifle bullets—such as deer and squirrel hunters use throughout our country—or buck shot, are seldom dangerous, unless they happen in a vital organ. They rarely break a large bone, or injure the muscular tissues to any considerable extent. They work their way between tissues rather than pierce them, in consequence of being easily deflected from their course. Occasionally, however, they produce bad wounds of arteries, by only partly dividing them, thus leaving them in the most favorable condition for severe hemorrhage; but these small missiles produce little shock. Second, wounds from the Enfield rifle, and the rifled musket, are *always serious*, although they may *appear* but slight. These bullets produce a hideous destruction of tissue, tear bones and everything else to pieces; produce severe shock, extensive sloughing, with great danger of secondary hemorrhage. A wound of this kind resembles a cog-wheel wound, or that from some other crushing machinery, more than anything else, yet this does not describe it. The part is livid, the openings of both entrance and exit are ragged, the latter generally presenting everted edges, with masses and shreds of various tissues protruding from it. Hemorrhage is sometimes very free, at others scarcely any, although the same vessel may be wounded in both cases.

"*I have never seen a recovery from one of these Enfield rifle wounds involving a large bone, where amputation was not performed early;* that is, *was not a primary amputation.* The bone is uniformly comminuted, and the fragments are very sharp, so that the patient will die almost to a certainty from irritation, and the discharge, if he do not from *gangrene, which is not uncommon, even if the large vessels escape injury.*

"Third, the wounds produced by shells resemble those made by splinters, as at railroad accidents, more than anything I think of. There is usually not much contusion, but frequently much laceration. Sometimes an angular fragment will make a clean cut, followed by free and dangerous hemorrhage. The fragments, if the shell has exploded at some distance, frequently make long lacerated wounds, and penetrate and lodge in the tissues, and are difficult to extract. These wounds are dangerous, but not so bad as those made with any of the *large* rifle bullets, unless the fragments happen to be very large.

"When the explosion takes place very close by, the wounds produced are a combination of burn, laceration, contusion, and perhaps incision, and are attended with great mortality." In reply to some inquiries I recently made of him, he says, "I have seen several bayonet wounds, particularly after the battle of Rich Mountain; they were mostly among the enemy's wounded, and ugly things they are." I made this inquiry for the purpose of eliciting evidence as to the universal truthfulness of Mr. Guthrie's statement, that "*regiments charging with fixed bayonets never meet;*" and that bayonet wounds only occur in occasional personal encounters, or where one party has been cornered, and could not get out of the way. The Doctor does not give us the history of any of his bayonet wounds; hence we see no reason for questioning Mr. Guthrie's accuracy, as yet. He may give us more details in some future letter.

Of broadsword wounds he says: "I have seen none that amounted to anything serious, and cannot but think they are great bugbears. It is possible they may be avoided as a general thing, after the manner Mr. Guthrie states bayonet wounds are avoided, viz. by getting out of the way."

The following extract may not be thought uninteresting, as illustrating the peculiarity of this war. He says: "I was at the capture of Pegram, and among many things saw among the prisoners a late resident physician of New York city, who, upon the outbreak of this rebellion, fled to his native 'sacred soil,' and took up arms against the Government, like many others of the same nativity. I expressed to him my opinion that he was a great scoundrel, and I soon saw that he was a very poor surgeon. His operations on some of his own men were great failures. I cannot but think that the rebellion's loss is the soldier's gain, and that he is what he richly deserves to be—a prisoner."

One other and I am done. He says: "Day before yesterday, a party of our scouts saw a company of cavalry approaching their position. As soon as they came within range they of course were fired upon by our men, and one horseman was seen to fall from his saddle. Our men ran to the fallen horseman, who had been deserted suddenly by his companions, and who was unable to speak, and made every effort to get him into our camp alive, but they failed, he having died on the road. His dress showed him to be an officer, and on examination made it clear that our scouts had killed John A. Washington, the former owner of Mount Vernon. *Three Enfield rifle* bullets had passed through his body. We sent his body to his friends the following morning with a flag of truce. The Colonel who received it was affected to tears, and said there appeared to be something terribly strange about the matter, a kind of fatality he could not comprehend. As you may suppose from what I have said about Enfield rifle wounds, there was little wonder that the unfortunate descendant of our immortal Washington never spoke to his captors."

The doctor closes his letter saying, "I write this almost under fire, our army having been engaged in more or less constant skirmishing for two days past, and the enemy in unsuccessful efforts to flank us and get upon our rear. A number of our men have been brought in wounded during this time, but it is worthy of remark that a large proportion of their wounds are from the small bullets above referred to, and consequently are but few of them serious. They will seldom break a bone larger than a metacarpal. You can from this, form some idea how the enemy in these parts are armed." From other sources we have learned that this skirmishing at Cheat Mountain, above spoken of, resulted on the 16th, two days after the date of his letter, in repulse of the rebels under Lee. I am looking for further accounts from the same author, and shall be happy to extract from them anything you may think desirable for publication.

Yours etc., S. R.

New York, Sept. 28th, 1861.

Protest against the Appointment of a Non-Medical Man to the Office of Brigade Surgeon, by the Essex Co. (N. J.) Medical Society.

[The following correspondence appears in the *Med. and Surg. Reporter.*—Ed. Med. Times.]

Orange, N. J., September 18th, 1861.

C. A. Finley, Esq., M.D., Surgeon-General U. S. A.

Dear Sir:—In behalf, and at the request of the members of the "District Medical Society for the County of Essex, N. J.," I address you in relation to the recent appointment of Mr. John J. Craven, of Newark, to the office of Brigade Surgeon. Mr. Craven is an old resident, and I believe a native of Newark. He has been engaged in various pursuits, as a carpenter, a dealer in merchandise, a keeper of a saloon, etc., till two years ago, when he entered the office of Dr. G. Grant, now Surgeon of the 2d Regiment, N. J. V., for the study of medicine. He remained with him three or four months, when he left his office, and set up for himself as "Doctor Craven." I am informed by the medical gentlemen of Newark, that he has no *medical* or *surgical* knowledge which can avail him in the position to which he has been assigned. He has no diploma; has never attended medical lectures; has no license to practice; and has not the shadow of a claim to a medical status at home. He was surgeon of one of the three months' regiments, having obtained his commission during the times of peace, by virtue of his assumed title, and at a time when medical attainment was not considered necessary in organizing a regimental staff. When his regiment returned, he endeavored to obtain another appointment, but was unable to secure it. The profession of this District is now surprised and mortified by the announcement of his appointment to the responsible post of Brigade Surgeon. I am desired by the members of the Medical Society of this District, in their behalf, to enter a respectful protest, in which I cordially unite, against this appointment of John J. Craven. We do so in vindication of the honor and dignity of the medical profession in this portion of New Jersey. Drs. Dougherty, Osborne, Grant, Oakley, and Woodhull, have gone out from among us as Regimental Surgeons. They are medical men whom we respect and esteem, as well educated and thoroughly competent. We ask in the name of the profession at large, that they shall not be compelled within the camp, to consult with one, who at home does not aspire to an equality with them, and who is known as an irregular and unlicensed practitioner, professional intercourse with whom, on their part, would subject them to censure and expulsion from the ranks of the profession, by a violation of the Code of Medical Ethics which it is their ambition to honor and magnify. We feel assured that you will be pleased to know the facts as above detailed, and the feelings of the profession here in regard to them, and that they will receive such attention at your hands as the circumstances of the case will allow.

I am, very respectfully,
Your obedient servant,
Stephen Wickes,
President Dist. Med. Soc'y of the Co. of Essex, N. J.
Attest: Hiram H. Tichenor,
Sec'y of Dist. Med. Soc. of Essex Co.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
SESSION OF 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture III. Part I.

Recapitulation of Subjects of preceding Lecture.—Application of Percussion to the Diagnosis of Pulmonary Tuberculosis. Examination of a Series of Cases in which the Deposit of Tubercle was abundant.—Examination of a Case in which the Tuberculous Deposit was small.

Gentlemen:—In my last lecture I considered percussion as applied to the diagnosis of emphysema and pneumo-hydrothorax; of affections giving rise to liquid in the pleural sac, viz. ordinary pleurisy, empyema, and hydrothorax; of pneumonia, together with other affections involving solidification of lung and intra-thoracic tumors, leaving the subject of tuberculous disease for subsequent consideration. I considered, also, the application of percussion, in a negative point of view, to the diagnosis of certain affections which do not give rise to signs obtained by this method. These affections are, bronchitis in its ordinary form, and the variety called capillary, asthma, pleurodynia, intercostal neuralgia, and various laryngeal affections. The application of percussion to the diagnosis of these affections is of great practical importance, since it enables us to exclude other affections with which they would be liable to be confounded were we dependent on symptoms alone.

I shall now proceed to consider the application of percussion to the diagnosis of pulmonary tuberculosis. And, with reference to physical signs, it is convenient to arrange cases of tuberculosis into three groups, as follows:—*First*, Cases in which the deposit of tubercle is abundant; by the term abundant, I mean a quantity sufficient to furnish well-marked, obvious signs. The quantity is abundant in by far the greater number of the cases of the disease which present themselves in practice, no matter how early patients come under our observation, after the symptoms of pulmonary disease have first declared themselves. The diagnosis, in these cases, by means of the symptoms and signs, involves usually little or no difficulty. *Second*, Cases in which the quantity of tuberculous deposit is small. It is in cases only in which the deposit is in small, disseminated masses, that much difficulty arises from the fact that the signs are not sufficiently well marked. Fortunately, as regards diagnosis, although unfortunately for the patients affected with this disease, this second group of cases embraces but a small proportion. *Third*, Cases in which the disease is advanced. I mean by this, that the disease has advanced to the formation of cavities in the lungs. The signs peculiar to this group of cases are those which denote cavities. We shall see that this classification of cases is convenient with reference to the signs obtained by auscultation as well as percussion.

What are the signs obtained by percussion when a deposit of tubercle has taken place? They are not the same in all cases. As a rule, there is diminished resonance, or dulness, over the tuberculous deposit. But exceptions to this rule are not very infrequent. The resonance may not be diminished, and it may even be exaggerated, although a considerable amount of tubercle has been deposited. But the resonance in these exceptional cases is always changed in character; it is either tympanitic or vesiculo-tympanitic resonance. We may have tympanitic resonance over a portion of lung completely solidified by tubercle, the amount of sonorousness not being less than in health. It is easy enough to distinguish this from the normal resonance, by the absence of the vesicular quality of sound, and the elevation of pitch. Again, we may have a vesiculo-tympanitic resonance, the intensity not diminished. This occurs when, as is not infrequent, more or less of the pulmonary lobules in proximity to the tuberculous deposit become emphysematous; and, also, when the relations of the deposit to the bronchial tubes and walls of the chest are such as to give rise to a tympanitic resonance of considerable intensity, which is combined with the vesicular resonance yielded by the healthy lobules in proximity to the deposit. We recognise the vesiculo-tympanitic resonance readily by the deficiency of the vesicular quality of sound, and the elevation of pitch. Bear in mind, then, gentlemen, that, although dulness is generally produced by a tuberculous deposit, this is not an invariable rule, but that, by percussing over a deposit, a resonance is sometimes produced equal to, or exceeding, that of health; as regards intensity, the resonance, however, in these cases, being always either purely tympanitic or vesiculo-tympanitic in character.

Suppose, in percussing the chest of a patient, we find dulness, are we to infer therefrom that tubercle exists? Certainly not. Dulness, as we have seen, is due to various other pathological conditions, existing in pneumonia, œdema, pleurisy, etc. If, however, we take into account the situation and the extent of the dulness, and connect with it certain diagnostic symptoms, percussion alone is often nearly, or even quite, adequate to a positive diagnosis. It is a well-known law of pulmonary tuberculosis that the deposit takes place first at or near the summit of the lung on one side, and subsequently it occurs in the same situation in the opposite lung. The deposit very rarely extends over the whole of the upper lobe so as to solidify the lobe as pneumonia does. The dulness, therefore, is more or less circumscribed, as well as greater or less in degree. Now, if a patient present himself to us for examination, and we find dulness on percussion within a certain space at the summit of the chest; and if the history and symptoms in the case point to tubercle, we should be pretty safe in basing our diagnosis upon the evidence afforded by percussion alone, although we should never fail, under these circumstances, to avail ourselves of the additional information afforded by auscultation and other methods of examination.

I shall now proceed to illustrate the application of percussion in cases of tuberculosis. And for this purpose I have selected out of about fifty cases of the disease in my wards, six patients whom I shall examine before you. I have selected these patients at random from among those who are best able to appear in the amphitheatre. And here let me remark that you will be struck by the fact that most of these patients do not present in the countenance or general appearance, evidence of serious disease. They are not much emaciated, and their aspects are not notably morbid. You will find this to be true of certain cases. There is sometimes so little appearance of disease that you could hardly be persuaded of the existence of tubercle, were it not for the physical signs. Another fact may be here mentioned: the general appearance of disease and the symptoms are often not in proportion to the amount of tuberculous deposit as determined by the physical signs.

I now percuss the chest at the summit on the two sides successively in the patient before you. You perceive an evident disparity. There is dulness at the left summit in front, in what is called the infra-clavicular region. Observe, the sonorousness is less on that side; the vesicular quality is less marked, and the pitch is raised, the latter changes being invariable whenever dulness exists. Now, this patient has a chronic cough; he has lost weight, and hemoptysis has occurred. In view of these diagnostic events, finding, as we do, dulness over a circumscribed space, we would be safe in saying that a deposit of tubercle exists, without seeking for other signs which, however, we ought not to disregard.

Let me illustrate in this, and the other cases, two modes of percussing, in order to determine whether the deposit of tubercle be situated near the superficies of the lung or deep in its substance. The two modes are called deep and superficial percussion; in other words, deep is strong, and superficial is light percussion. If I strike lightly, the blow does not elicit sound, except from the lung substance near the thoracic walls; the blow does not, as it were, penetrate deeply. If the deposit be near the surface, a disparity on percussing the two sides will be evident, but if the deposit be deeply situated, and not large, a disparity may not be made apparent by this mode of percussing. In the latter case, a strong blow is requisite; the sound being brought out from a greater depth, a disparity is marked. In this way it is generally easy to determine whether the deposit be near the surface of the lung at the point where the percussion is made, or situated deeply. I percuss the two sides lightly in this patient, and the disparity is slight. I percuss strongly, and the disparity is much more marked. Hence, I conclude the deposit, in this case, to be deeply situated.

Another point of inquiry is this:—Is the deposit limited to, or more abundant, at the anterior or posterior portion of the lung? I settle this question by percussing in front and behind, on the two sides, and comparing the results. Here let me say, that in the examinations of the chest, in cases of tuberculosis, the scapular regions are very important. I wish to impress this the more, because the late Dr. Swett, in his able work on diseases of the chest, declared that percussion over the scapula was of little value. So far from this being true, it will often be found that the evidence of a deposit of tubercle over the scapula is more marked than on the anterior surface. It is true that over the scapula the vesicular quality of the sound on percussion is not so appreciable as in front, but it is quite as easy to make a comparison between the two sides as regards intensity and pitch of sound. I now percuss this patient over the two scapulæ, above and below the spinous ridge. In this case, although dulness is evident on the left side, it is less marked than in front. The conclusion, therefore, is, the deposit is greater at the anterior than at the posterior portion of the lung on the left side.

Let me illustrate in this case, as I shall also in the other cases, a mode of percussing which I find often valuable. I place the fingers of my left hand, from behind forward, between the shoulder and the neck, grasping the part firmly, and percuss so that the blows fall directly on the top of the lung. A disparity is frequently in this way rendered more apparent than by percussing below this situation, either in front or behind. You perceive this is true in the case now before you.

Lastly, I percuss at the base of the chest, behind, and you perceive the resonance is intense, vesicular, and equal on the two sides. This should never be omitted in examining with reference to tuberculosis, for, in this way, you determine that dulness, if it exist, is limited to the summit, and you exclude certain conditions, especially pleuritic effusion, which would modify the resonance at the summit.

I now introduce another patient. Here we have relative dulness at the right summit in front. You will recollect the resonance in health is somewhat less at the right than at the left summit, but the disparity is sufficient, in this case, to warrant at once the conclusion that it is abnormal. In this case the dulness is more marked on superficial or light, than on deep or strong percussion, hence, the deposit is near the surface. It is here also more marked in front than behind; hence the deposit is greater anteriorly than posteriorly. Percussing between the neck and shoulders the disparity is evident, but less marked than in the preceding case.

Introducing another patient, we find dulness in this case more marked over the scapula than in front on the left side. This case will serve to illustrate the importance of making percussion at the summit behind.

In another patient we find a disparity at the summit, in front, on the left side, but, as regards intensity of sound, the disparity is extremely slight; in other words, there is but little dulness. You perceive, however, that the sound is vesiculo-tympanitic. In such a case as this, the evidence afforded by auscultation, of the existence of solidification, is more important than in a case in which the dulness is more marked.

In another case we have an illustration of a condition which you will occasionally find, viz. in front there is relative dulness on one side, and behind relative dulness exists on the opposite side. The explanation of this is, the deposit occurred either anteriorly or posteriorly, we will say anteriorly, first on one side, and before the deposit had extended much to the posterior surface of the same side it took place in the opposite lung—in the latter being situated at the posterior portion.[*]

The patient, whom I now introduce, has a small deposit of tubercle. The signs obtained by percussion, and other methods, are less marked than in the cases already examined, in which the quantity of tubercle is abundant. Cases in which the deposit is as small as in the patient before you, are not common. In the majority of cases of tuberculosis, the amount of deposit is sufficient to give rise to well-marked signs. It is only in cases of small deposit that the diagnosis is attended with difficulty. With due knowledge and care, however, in these cases, the existence of the deposit can generally be determined. I percuss the chest of this patient in front, at the summit, and on the two sides. If you observe closely, you will perceive a disparity in the resonance between the two sides. There is not much diminution in sonorousness on the left side, but the vesicular quality of the resonance is less, and the pitch higher than on the right side. I percuss repeatedly and as evenly as possible, in all respects, on the two sides; the disparity, although slight, is manifest on each percussion, showing that it is not produced by a difference in the mode of percussing. I percuss over the lower part of the chest, in front, to ascertain that the stomach is not distended with gas; for, when this is the case, the character of the resonance over the whole of the left anterior surface of the chest may be somewhat modified. I also examine the chest, in front and behind, with the eye, and satisfy myself that it is symmetrical. The resonance, then, in this case, at the left summit, is less intense, less vesicular, and higher in pitch than at the right summit. Now, is this evidence of tuberculosis? Very strongly so; indeed, taken in connexion with the history and symptoms, the evidence is almost or quite conclusive. It is much more so than if the slight dulness were on the right side, because, normally, the right side is slightly dull on percussion as compared with the left side, and, therefore, the normal disparity is reversed in this case.

In cases of small deposit of tubercle, it is important to take cognizance of the normal disparity just alluded to. This disparity, in certain cases, embarrasses us, viz. in cases in which the question is whether a deposit exists on the right side. We find a certain amount of dulness at the right summit, and we have to decide whether this dulness exceeds the limits of a normal disparity. To decide this point requires an exercise of judgment which is acquired by experience, and we call to our aid the information obtained by other methods of examination. But if we find the relative dulness at the left summit, then the normal disparity existing between the two sides is of advantage to us; we know that this dulness must denote a morbid condition, since it is the reverse of what obtains in health.

In cases of small deposit of tubercle, we should percuss with care on the top of the chest, as I have already illustrated, and as I now do in this case. You perceive that the disparity is more apparent than in front. Percussion over the scapulæ is important, recollecting that dulness is sometimes more marked here than in front. Both deep and superficial percussion are to be employed. In short, the object is to ascertain whether, on either side, the sonorousness is diminished or the resonance vesiculo-tympanitic. And if found to be so on the left side, it is undoubtedly an abnormal sign; but if it be found so on the right side it is a question whether the disparity be, or be not, greater than may belong to health.

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[*] Other cases were examined, and these cases, exclusive of the first one, more fully than appears in this report of the lecture. In order to avoid repetitions, which are less desirable in a published lecture than in a lecture as given, when they relate to demonstrations, the several points illustrated by the different cases are here only mentioned.

Original Communications.

DIPHTHERIA.

By EZRA M. HUNT,

NEW JERSEY.

Although much has been written upon this disease, yet in its present type it is so new in our country and its prognosis is so critical, that carefully noted facts are still needed, if, perchance, they may throw some additional light upon it.

There are physiological and mechanical reasons, why affections involving the throat always call for careful discrimination and astute attention. The two grand channels, the one of nutrition, and the other of respiration, are at once endangered, and sense and experience, no less than science, teach us the importance of sensitive watchfulness. Disease here is not only often formidable of itself by impeding deglutition or breathing, but inflammatory action is quite readily transmitted to other organs, and thus serious complications occur. Scarlatina here often shows its greatest malignancy, and under the common names of black-tongue, putrid sore-throat, and malignant quinsy, enough of unfortunate interest has been thrown about throat affections as almost to invest them with the consideration due a leading speciality. But the source of anxiety, and the duty of searching scrutiny, are sadly multiplied in the symptoms and history of diphtheria. Call it idiopathic or symptomatic, the Egyptian disease, or croup diphtherite, ally it to pleuro-pneumonia, to sub-acute inflammation, or to any of the class of maladies in which there is unhealthy fibrinous exudation, yet with all the different theories there is no difference of opinion in respect to its formidable character. Many a physician, not used to blundering, has been outstripped by the unlooked-for rapidity of its crisis, and not a few of those, old in experience as well as years, have, in its start, and in their first cases, mistaken the seriousness of the case in hand. Once recognised as the sequelæ of measles, scarlatina, or some bronchial trouble, it has now plainly established itself as more frequently an independent disease having its own distinct history, and not only plainly shows itself as an epidemic, but seems quite likely to take its permanent place in the regular catalogue of general mortality. In a brief way, without aiming at the theory, or the literature of the complaint, I propose to furnish a few practical facts such as experience, reading, and thought may have suggested.

It is by having plain matter-of-fact descriptions of disease, as it appears in different localities, that we are to form a general estimate of its character. This is the more important because diphtheria is not specially a city disease. Reports from small country towns and rural districts are not so apt to be furnished as by the well-organized societies of cities, and hence a longer time is needed before we can settle down to firm convictions as to treatment. In Middlesex Co., of this state, the disease has not prevailed to a very large extent, and yet in certain localities, sufficient to excite much alarm amongst the people, and to attract the decided attention of our physicians. On our eastern border it appeared both last winter and winter before last, but chiefly as a sequela to scarlatina and measles, which were there epidemic, and, although fatal in many cases, attracted no great attention as a distinct disease. In the vicinity of Elizabeth city, although the aggregate of cases was not large, it was marked by a high rate of mortality. In New Brunswick, there have been a number of cases, but these mostly in its suburbs and not assuming a decided epidemic form. Through the intermediate country there have been quite a number of scattered cases which by their severity or suddenness have attracted general and medical notice. Along with these, there have been a great number of throat affections of a milder character. We have been called upon to look into more throats than during many previous years of practice, and while some were imaginary troubles, yet a large number have shown a diffused redness differing from bronchitis or any of the usual irritations of the palate or tonsils, yet mild and readily yielding to the use of chlorate of potash, alum, and slight counter-irritation. Whether these bear the same relation to diphtheria that scarlatina simplex does to the maligna, I cannot determine. In the few specimen cases I have selected for remark, I have, however, excluded all these and confine myself to such as I feel fully justified in terming diphtheria. In order to present several facts in brief compass, a thing always desirable in medical communication, I subjoin the following table so far as it goes:—

Case 3d had no treatment except for quinsy.

Case 1 and 6 occurred in the practice of my co-laborer, Dr. M. The one that seemed much benefited by the local application of the nitrate of silver.

Case.	Age.	Result.	Progress of Disease when first seen.	Average duration of Disease.
1. girl.	4 years.	Died.	1 week.	4 weeks.
2. girl.	18 "	Died.	5 days.	7 days.
3. boy.	21 "	Died.	Moribund.	7 days.
4. boy.	7 "	Recovered.	Seen early.	2 weeks.
5. girl.	5 "	Died.	5 days.	8 w'ks (relapse).
6. boy.	8 "	Recovered.	Seen early.	2 weeks.
7. girl.	18 "	Recovered.	Seen early.	6 days.
8. boy.	15 "	Died.	4 days.	18 days.
9. girl.	10 "	Recovered.	Seen early.	7 days.
10. boy.	17 "	"	"	17 days.
11. girl.	17 "	"	"	4 days.
12. boy.	16 "	"	"	10 days.

Cases 2, 3, 5, were mistaken by the parents for slight quinsy, and therefore not much attended to.

As to temperament, those of scrofulous diathesis most speedily succumbed, but among those dying were two of apparently excellent constitutions.

Of those dying, none went to bed voluntarily except to die. They felt more comfortable sitting up, and showed but little alarm at their condition. Decided restlessness in one or two cases, almost like that of mild delirium tremens, was noticeable.

The attack on each case was with chilliness and fever, and in some, but not in all cases, vomiting. There was convulsion in but one case and that slight.

The mode of death was precisely the same in each case, anæmia. Each one had no perceptible pulse at the wrist several hours before death.

The fatal symptom was a sudden change of the pulse from its frequent, quick, nervous beat, to a tired slow one, and then after a few hours death.

Every case seen in two days after attack recovered; those not seen until four days or after, all died.

Of all the cases save one, an unstrung, spiteful, frequent, irritable pulse was characterized. In those that recovered, the change from this was usually gradual but marked. In one case, a boy of 17 (No. 10), the pulse was throughout preternaturally slow. In one case the throat was not badly affected, but the deposit was chiefly in the mouth and sides of the cheek. This was a young lady who was a constant watcher over a sister sick with the disease.

Swelling of the glands about the throat was a prominent symptom in most of the fatal cases.

Those cases seemed to do best in which the upper portion of the throat and the nasal organs were involved, more in proportion than the laryngeal or pharyngeal portion. The condition of the bowels and that of the urine, were not such as to call for any special medication. In each case there was some difficulty of deglutition, but this not as decided as one might be led to suppose. Absence of appetite, and in one or two fatal cases, loathing of food, were accompanying circumstances. All were as well supported as possible, and case No. 8 took, by mouth and injection, a good amount of nourishment up to the very last. Although the pulse in each case denoted feebleness and nervous irritability, yet acts did not show great weariness. Vomiting of food was in one fatal case a distressing symptom throughout the disease, digestive power seeming to be suspended thereby. Difficulty of breathing was an occasional but not prominent symptom. In two or three cases recovery was protracted, the patient seeming very slowly to regain strength and energy.

Bearing on contagion, are the following points:—Case No. 1, was a child who had been on a visit where the disease prevailed at a distance of a few miles. No other children in the family, however, contracted the disease.

Cases No. 3 and 4, occurred in two different families where these were the only children, and both had been visited, between two and three weeks previously, by a lady who had fled from Staten Island on account of a very malignant type of the affection in the family with which she resided. She complained of sore throat while on the visit, but not serious. An older member of one of the families had, after the other cases, a deposit of false membrane on one tonsil, but it speedily yielded to a single cauterization.

Cases 5, 6, 7, and 13, occurred in one family in succession among those most exposed, and one or two other members suffered from the kind of sore-throat above referred to. Severalo thers, however, who were exposed, escaped. The school was disbanded for two weeks, and case No. 13 was seized upon return but immediately removed. Cases 8 and 9 both occurred in another family, but a third child was not affected.

The general plan of treatment was as follows: Nitrate of silver applied with the porte caustique, or in a strong solution by means of a large camel's hair pencil chiefly along the sides of the patches of membrane. After this is fully formed and so abundant as not to be within reach, I believe caustic to be of little value. Dr. Abernethy, of Rahway, told me over a year since, after seeing much of the disease as a sequela of measles or scarlatina, that he always succeeded in checking the local trouble when he could thus keep in advance of the exudation, and such has been my experience. In some cases it has been reproduced, but not so freely or tenaciously as at first.

Externally counter-irritation was used with salt pork—pork and pepper, or turpentine, according to age, the design being to cause pretty speedily a slight eruption.

In cases where there were incipient signs of diphtheria I used opium and acetas plumbi as a gargle, and mild nitrate of silver solution, being directed by the same rules that would guide me in their choice for the mucous membrane of the eyelids, at the same time giving chlorate of potash internally. What these cases would have been in the absence of such treatment I know not, but I thought in them, as well as in one or two decided cases, I derived advantage from their use. I used Labarraque's solution somewhat, but believe it valuable only when there is much fœtor.

But the chief reliance is the constitutional treatment. Tonics, stimulants, and antiseptics, are surely demanded in the disease. The chlorine mixture used with judgment is among our best remedies. In some cases the chlorate of potash will agree better alone than with the hypochloric acid. I have never seen the disease which, as a rule, will so well bear the use of quinine, citrate of iron and quinine, wine whey, and the best of food. Yet a routine treatment of the malady is greatly to be deplored. It has some variety in type and symptoms, and is to be carefully watched and readily treated. In general, the nervous system is prominently involved, and the disease acts like a powerful depressant poison thereupon. Yet in the robust it often commences with fever of an inflammatory type. Case No. 12 was taken the most severely of any I saw. I gave over night a free purge of calomel and chlorate of potash, and ipecacuanha every three hours, until the next day at noon. A single dose of quinine, three grs., was then administered, followed by a Dover's powder at night to control extreme restlessness. The subsequent treatment was the chlorine mixture, wine whey, quinine, and an occasional Dover's powder. I believe opium indicated where there is much restlessness in the early part of the attack; the nervous thrill of the pulse, the appearance of the tongue, and the sleepless nights, justify their judicious use. Among the many excellent articles on the disease which your good journal has furnished us, none has satisfied me better than that of Dr. Kneeland.

One or two brief suggestions and I have done.

1st. If the general theory as to the disease is correct, we ought to be able to do something by means of prophylactics. Is it not well to use the chlorate of potash for children in every family in which the disease appears to enjoin regularity in eating and a good diet. The more I have seen of the ailment, the more has my confidence grown in the treatment if commenced in season; and there is reason to believe that a bad state of the solids exists somewhat previous to the local manifestation in the throat. The very fact of taking something as a preventive has a valuable control over mental excitement, and the chlorate of potash, being itself a tonic, is no less a safe than an efficient remedy.

2d. I have used muriate of ammonia somewhat in the disease, but have not definite facts enough to recommend it, but I beg leave to refer to it as worthy of trial. Many eminent German physicians have valued it highly as an alterative, and they at least would suggest it as thus valuable in this disease. It combines an expectorant, a stimulant, an antiseptic, and I have long attached much value to it in the treatment of throat affections, both as a local and general stimulant and alterative. Others who have thus employed it have confirmed its value. I notice that Dr. Kneeland refers to it as a valuable component in a gargle for this disease, but I believe it also highly useful in its constitutional action. There are a few other points as to pathology and hypothetical treatment, to which I might allude, but as my design was only to speak of practical facts and experience, I leave those for more extended testing and research. The disease is one still *sub judice*, and even the small fractions of facts may aid in arriving at more settled conclusions as to treatment.

AN ACCOUNT OF THE DISEASE OF COUNT CAVOUR.

TRANSLATED FROM THE FRENCH.

By DR. P. F. C. DESLANDES.

The sudden death of Count Cavour has not only been a great public event, but, in a medical point of view, particularly in England, the subject of very severe criticisms, which it might perhaps have been more proper not to publish before having received sufficient information. Having received on this subject a detailed and reliable account, the editor of *L'Union Médicale* presents it in his paper under the form of a clinical case.

M. de C., ætat. fifty-one, of middle size, had a large head, a short neck, broad shoulders, and was of a lymphatico-sanguine temperament. He slept little (four or five hours in the twenty-four), ate much, and followed, as to diet, the custom of England, where he had lived in his youth. For eleven years he worked fifteen hours a day. His occupations were incessant, and had been particularly so for the last two years. Except very slight attacks of gout, to which he was subject, and, six years ago, an intermittent fever, which he had much trouble to get rid of, never had he experienced any serious or long disease.

For about one year he had been complaining of very sharp colics, coming on at night usually, and which he treated by one or two bleedings. He was almost entirely his own doctor, putting little confidence in physicians generally, although he consulted them when he was sick. The physician who had attended him from his childhood had been dead two years, and was replaced by Dr. R., a man of merit, but who had not enough influence over the mind of his illustrious patient.

About the 15th of May, Mr. de C. having spent three days on one of his estates at Léri, near Verceil, a border country, exposed himself to the great heat of the sun in going through the fields. On his return to Turin, he was observed not to be so well as usual, and to be more irritable. On the 20th of May, after having dined with appetite, and without having presented anything peculiar in the evening, he was again seized with colic. He sent for his physician, and he was bled. The next day, 30th, the fever being intense, it was thought necessary to bleed him again twice. The night was calm, the sleep quiet. On the morning of the 31st, the apyrexia was complete. Mr. de C., thinking himself cured, acted accordingly. Contrary to the advice of Dr. R., he received many persons during the day, and dispatched a good deal of urgent business. He had kept his bed. The following night (that of the 31st of May), a new attack came on with reaction towards the brain. The abdomen was painless on pressure. At the request of the patient, bloodletting was again resorted to; and he was bled twice. The night of the 1st to the morning of the 2d, he was almost sleepless. An injection was prescribed, and, in anticipation of a future exacerbation, the following prescription was given: Fifteen grains of citrate of quinine in twelve pills, two pills every two hours. At 10 o'clock P.M., the fever returned, but was preceded, this time, by chills which lasted one hour. It continued during the night, and the next day, June the 3d, at noon, it had not yet disappeared. A consultation with Dr. Maffani was appointed for 5 o'clock. The patient was delirious, and insisted on being bled. Bloodletting was practised for the sixth time at 4 o'clock, one hour before the consultation. The blood was without a buffy coat, rich in fibrine, and very plastic. At 5 o'clock the head was scarcely warm; the physiognomy was natural; the delirium had ceased; the tongue was moist; the skin good: the pulse full but soft, and the fever moderate. Nothing abnormal in the chest or abdomen. Urine rather muddy. At 10 o'clock the apyrexia was almost complete. 15 grains of citrate of quinine were taken in three doses, at 11, at 3, and at 6 o'clock. The calm did not last long. At 2 o'clock A.M., on the 4th, another paroxysm supervened, with cold stage, which lasted one hour; then heat, with delirium, agitation, a burning head, and diarrhœa. At 7 o'clock the symptoms were not quite so intense. The patient answered questions; but left to himself, he immediately became delirious. The same dose of citrate of quinine was prescribed, together with cold applications to the head, and synapisms to the legs. At noon the fever had decreased, the apyrexia was almost complete.

At 8 o'clock there was a new paroxysm; the delirium of the same kind as before; ran on all the subjects which habitually engaged the attention of the patient. He still answered correctly any questions, said he did not suffer, but often carried his hand to his head, which was very hot. The paroxysm lasted all night. A draught composed of distilled water of lettuce, distilled water of oleander, and syrup of diacodium was given.

On the morning of the 5th, at seven o'clock, the fever was less intense, the pulse fuller. The urine rather abundant, with a slight deposit. Prescription: Citrate of quinine, xv. grs., acetate of morphia, two-fifths grs. To take in four doses. At noon the pulsations of the heart were obscure, and the pulse hardly perceptible at the left wrist. Four cups were applied at the nape of the neck, and there seemed to be a little improvement. At six o'clock there was a change for the worse, yet he was still conscious at times. At eleven o'clock he recognised the King. At two o'clock on the morning of the 6th, the body was covered with a cold sweat; the radial artery was no longer to be felt. The delirium was constant. Political men and affairs passed and repassed without order before the eyes of the patient. Mr. Farini had watched at his bedside. At three o'clock he gave him the papers destined for the King. At half-past four o'clock all consciousness had disappeared. At a quarter to seven o'clock a little rattle was heard: ten minutes after Mr. De C. was no more.

The above is the correct account of the symptoms of the disease, and the means used in its treatment. Now what was the disease? The beginning had been insidious, and might, as it did, on account of the precedents of the patient, give rise to doubts. However, we perceive from the administration of the citrate of quinine, that already, before the consultation with Dr. Maffani, the family physician had diagnosticated an intermittent fever. This learned physician shared this conviction, since the antiperiodic agent was used until the last moments.

If we review the symptoms we can more or less clearly distinguish fine paroxysms of unequal duration and separated by unequal intervals. The first during the night of the 29th to the 30th of May; the second, in that of the 31st of May to the 1st of June; the third, in the evening of the 2d. As to the two others, one would have occurred in the night of the 3d to the 4th, at two o'clock in the morning, and the other in the evening of the same day, at eight o'clock.

In this hypothesis, certainly very plausible, of an intermittent fever of a malignant type, many questions arise. The result was fatal, notwithstanding the repeated use of the febrifuges. Could they have been employed too late, and in too small doses? Could not the repeated bloodletting at such short intervals have diminished their effect? These repeated bleedings have struck our minds with astonishment. Mr. De C. was robust and in the habit of being bled. On this point we could only venture assertions. We will say, however, that when the access was very strong, blood-letting was observed to increase the intensity of the periodical concentrations.

As to the other question, every one knows that malignant intermittent fevers cannot be too soon attacked. A few days' delay may have thus influenced the result. Many physicians affirm that when treated in time and energetically, the success is almost certain; whilst others, having an experience equally great of these affections, declare the prognosis to be always very grave. Could these differences of opinion depend on the difference of locality and latitude where each one has practised? Again, the difficulties which the diagnosis presents are sometimes very great. If, as in some epidemics, the symptoms presented only an exaggeration of the usual stages of the febrile paroxysm, the error could be generally avoided. But these attacks are not only malignant, but sometimes marked by other morbid forms, by the *Fièvre muqueuse ataxique of Pinel*, for example, which, according to our confrère, Dr. Cerise, seemed to have characterised Mr. De C 's disease.

One remark and I have done. Does the citrate of quinine, in equal doses, possess the same action as the sulphate, much better known and oftener used among us?

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THE RHODE ISLAND MEDICAL SOCIETY.—The first quarterly meeting was held at the "Franklin Society Rooms," Providence, on Wednesday, the 2d inst., at 10 o'clock A.M. The society was called to order as usual, by Dr. C. W. Parsons, the President; and in the absence of the Recording Secretary as surgeon in one of the R. I. regiments, Dr. Homer Batchelder, M.D., of Cranston, was elected Secretary *pro tem.* The Society passed a resolution to appoint and send delegates to other State Medical Societies; and Dr. Edwin M. Snow was elected a delegate to attend the annual meeting of the Vermont Medical Society, to be held on the 23d inst.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 25th, 1861.

Dr. A. C. Post, President, in the Chair.

EXTENSIVE REPRODUCTION OF BONE.

Dr. Sands presented two specimens of tibiæ which illustrated in rather a remarkable manner the reproductive power of bone. The specimens were sent him by Dr. W. J. Almon, of Halifax, who also furnished the following history:—

"The boy died suddenly a few days ago of serous effusion into the ventricles of the brain. I send you the bones of both legs, in order that you may compare their relative length, and the size of the two fibulas. The patient, aged twelve years, was an inmate of the Halifax Poor Asylum, of a pale complexion and scrofulous habit with necrosis of the tibia; the dead bone showing itself about an inch below the tuberosity of the tibia, and at other points to about two inches above the ankle-joint. There was constant discharge from the leg, hectic fever, and other constitutional symptoms. Several months after he had been admitted into the Asylum I made up my mind to remove the necrosed bone. After I had commenced the operation, I found the dead and new bone so intimately connected, and my patient's strength sinking, I then thought that it was best to remove the whole bone, which I accomplished by sawing it through just below the tuberosity, and about two inches above the malleolus, and dissecting out the bone. There was but little hemorrhage, and notwithstanding a rather severe attack of smallpox, which set in a short time after the operation, the wound healed by granulation. For the last few months the boy has been learning the trade of a shoemaker, and has walked about with the aid of a crutch, and when not watched, without it."

On close inspection of the specimen but two points were seen where the bone had failed in its reproductive efforts, and one of these was about an inch above the internal malleolus, and the other about an inch and a half above the middle of the shaft. From the superior articular surface of the tibia to a distance of six inches there is a continuous formation of bone. Although the amount of bone reproduced was very considerable, Dr. Sands still regarded the specimen as illustrating the truth of the conclusions arrived at by the German experimenters, viz. that in cases where the periosteum was left there the reproduction was most perfect; but where the periosteum was removed there the effort at restoration was very imperfect. He did not think that in the case under consideration the reproduction would have been any more complete.

CARTILAGES WITHIN THE SHEATH OF THE TENDON.

Dr. Post presented several specimens of cartilage which he removed from the theca of the flexor tendon of the middle finger of the left hand of a patient, aged twenty-five. The tumor was about the size of an ordinary nutmeg, and was situated at the junction of the first phalanx with the palm of the hand, was hard to the feel, and lobulated, and moved slightly on the subjacent parts. Instead of one cartilaginous tumor, as was expected to be found, there were several. Two, considerably larger than the others, lay within the synovial cavity, and upon the surface of the tendon of the flexor sublimis; others were found attached to the fringed edges of the synovial membrane, and portions of these were lying upon the surface of the flexor sublimis; others were found between the flexor sublimis tendon and that of the profundis; while others were beneath the profundis. Dr. Post stated that it was the only instance that he had met with in which cartilages were found within the sheath of the tendon.

MELANOTIC DISEASE OF EYE.

Dr. Post also exhibited a specimen of melanotic disease of the eye which was removed from a young woman in New Jersey, about a week before. The cavities of the eye were found filled with the diseased deposit, and there was besides a mass of considerable size which surrounded the globe of the eye; yet between these two there existed no communication, the coats of the eye being uninvolved. There was a considerable amount of œdema of the subconjunctival tissue, forming a considerable tumor which covered the lower part of the eyeball.

TONSIL REMOVED BY ECRASEUR.

An enlarged tonsil was also shown which was removed by the wire écraseur. He thought that the advantage of the instrument in such cases was, that a larger portion of the tonsil could be grasped than by the guillotine. The operation occupied but a short time, and seemed to occasion very little pain.

The Society then adjourned.

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NEW YORK MEDICAL AND SURGICAL SOCIETY.

The interest manifested in the reports last year of the discussion on diphtheria from this society has induced us to offer in a condensed form the instructive medical and surgical cases that have been presented by the different members during the last year or two. In order to make such matter as attractive as possible the cases will be, as far as practicable, arranged in groups irrespective of the order or time of presentation.

Peritonitis.

Perforation of Appendix Vermiformis.

Case I. *Pelvic Abscess simulating Enlargement of Bladder.*—Dr. Buck was called to see a lad, 16 years of age, who was thought to be suffering from distension of the bladder. There existed in the region of the bladder a fluctuating tumor reaching upwards within two inches of the umbilicus, and easily recognised through the rectum. The urine passed freely, however, and the catheter after having been introduced could not be readily moved about. Pain was complained of in the lower part of the belly; pulse 130; no rigor and no fever. The case was a very perplexing one, but Dr. Buck decided to puncture the tumor through the rectum. The operation resulted in the evacuation of nearly two quarts of purulent fluid, the swelling of the abdomen at the same time disappearing. The patient lived a little more than a week afterwards, death being preceded by vomiting, diarrhœa, and occasional hiccough. On post-mortem examination the great omentum was found adherent to the pubes and the small intestines adherent to one another, and to the brim of the pelvis; thus forming the superior boundary of a pelvic abscess, which occupied precisely the situation of the bladder in a state of distension. The bladder itself was small and contracted.

Case II. *Probable Perforation of Appendix Vermiformis—Peritonitis—Recovery of Patient.—Discharge of Blood and Pus from the Bladder during Convalescence.*—Dr. Clark related the following case of peritonitis, probably depending on perforation of the appendix vermiformis. The patient, aged 14, was a son of a medical friend, and was first seen by Dr. Clark on the 25th of March, in consultation with Drs. Smith and Buck. The chief symptoms at this time were pain, and great tenderness in the right iliac region; the pulse was not much accelerated, and there was no tympanitis. Hopes were entertained that the disease would not prove serious, and a full dose of opium, together with an enema, was administered. On the following morning, the patient seemed comfortable, but towards evening he grew worse, and showed evident signs of general peritonitis. The pain and tenderness, however, were still most intense in the right iliac region. Opium was now regularly administered, and its use continued throughout the subsequent progress of the case. The drug was given chiefly in the form of laudanum, and the largest amount administered on April 3, when the patient took gtts. 1350. These large doses removed the pain, and induced sleep, but the intellect was not at all affected. The disease was attended with several remissions and exacerbations, and each time, as the severity of the symptoms declined the dose of opium was diminished, to be again increased in proportion to the violence of the disease. The case exhibited several unusual features, one of which was an inability to empty the bladder, without the assistance of the catheter. This symptom appeared soon after the supervention of general peritonitis. Another remarkable symptom was diuresis, which, for the most part, presented an intensity directly proportioned to the amount of opium administered. Thus on April 3, when the maximum quantity of laudanum was given, there were voided 136 oz. of urine, the largest amount passed during any period of twenty-four hours. The case was also complicated with diffuse inflammation in the parotid region, which appeared on the sixth day, and resembled the swelling seen in typhoid fever. Suppuration, which at one time seemed inevitable, did not occur, and the swelling, after a time, disappeared. At this stage of the disease calomel was added to the opium, and given in doses of gr. ij every two hours. At the end of thirty-six hours its use was discontinued. The last peculiarity in the case was noticed at the beginning of convalescence; it consisted in the discharge of a little pus and blood from the urethra during the evacuation of the bladder, and was first observed in the urine last voided. The presence of these morbid products in the urine lasted for several days, and their passage was attended with severe pain in the glans penis. Perforation of the bladder was suspected, but the occurrence of this accident was not rendered certain by any further evidence. The subsequent progress of the case was towards recovery. There yet remained, however, an irregular hardness in the right iliac region, also tenderness and considerable pain when the patient made any sudden or incautious movement of the body. In conclusion Dr. Clark expressed the opinion that the case should be regarded as one of perforation of the vermiform appendix, that had yielded to only moderate doses of opium.

Dr. Watson inquired whether any member of the Society had ever known of a sub-peritoneal abscess opening into the bladder.

Dr. Clark recollected the case of a young lady having the symptoms of an abscess above the bladder, and directed towards the right iliac fossa. The abscess opened into the bladder, as was indicated by the sudden discharge of turbid and extremely fœtid urine, and coincident subsidence of the tumor.

Dr. Dalton remarked that he had once made an autopsy where he discovered a tuberculous abscess that had burst into the bladder. Pus was noticed in the urine ten days before death. After death it was found that although pus had passed from the abscess into the bladder, the urine had not passed into the abscess.

Case III. *Perforating Ulcer of Stomach, and probably Passage of Renal Calculus—Peritonitis—Death.*—Dr. Clark related the following case: Some months ago I saw a gentleman who had been suffering a long time with the most formidable symptoms of dyspepsia. He was unable to take any kind of food, as he believed, without great distress. He vomited frequently, and lost flesh, so that he was very thin. Still he kept about his business to a certain extent, being able to go down town every second or third day. His physician had tried every kind of food, as he thought, that might serve his stomach, but seemingly to no purpose. The patient would occasionally vomit with his food little shreds of black matter, and it occurred to the physician that it would be better to give all the food cold. This did very well for a couple of days. He was sitting in his office about three o'clock in the afternoon reading a newspaper, when he was rather suddenly seized with severe pain which, at five o'clock, was described as being in the course of the ureter. The abdominal muscles at that time were as rigid as they could be made. I asked him if the testicle of that side was retracted, and he said rather impatiently that he believed it was. This pain continued with marked severity, and was only diminished by the administration of large doses of opium. His pulse from this time up to three A.M. the next day was steadily below 80, but there were present not the least traces of tympanitic distension, and no pain except on this one side. At three o'clock in the morning of the second day, i. e. thirty-six hours from the time of the attack, he had a very marked change in his symptoms. A message was sent to the physician and me, and when we arrived there we found the patient exceedingly prostrated. He had had what was then thought to be a fainting fit; he was perspiring pretty freely, and his friends thought he was dying. From that time the pain became more general, and by breakfast-time it extended over the whole abdomen. There was then some slight relaxation of the abdominal muscles, and some little tumefaction. About noon of that day he died.

A partial post-mortem examination was allowed, so partial that we were not permitted to satisfy ourselves in relation to one point of interest in the case. The first thing that struck us in opening the abdomen was a moderate amount of peritonitis. Believing this due to a perforation of the stomach we looked there, and discovered just near the pylorus one of those ulcers, which is, so to speak, walled up to a certain height, penetrating to the peritoneum, and apparently forced through, seeming more like a tear than anything else. We then imprudently announced that the immediate cause of death was perforation of the coats of the stomach. This being done we were not allowed to go further, and so had no opportunity of ascertaining whether or not a calculus existed in the ureter. My own view of the case was, that the pain of the first day was owing to the passage of a calculus down the ureter, and that this extraordinary tension of the walls of the abdomen, in some paroxysmal movement of the stomach, had caused rupture of the ulcer and peritonitis, and I still entertain that opinion. Dr. Detmold, who was present at the time of the autopsy, thought, inasmuch as the ureter, when cut across, was not reddened, that there was no calculus. There were no traces of cancerous degeneration about the organ.

I never saw in any person nearly so firm a contraction of the abdominal muscles that lasted so long. The striking thing about it was that the pulse did not go above 80 for thirty-six hours after the first attack, and was 120 a little after breakfast. When I saw him again it was 130, and it continued up to some high number during the few remaining hours that he lived. Then too after that came the relaxation of these exceedingly tense muscles.

Case IV. *Puerperal Peritonitis, etc.*—Dr. Clark had lately (April 1860) seen four cases of peritonitis, three of them after childbirth, and one the result of metritis; all of which have been successfully treated. The peritonitis in each case was treated by full doses of opium to produce the sensible effects of the drug; and in the case of metritis by leeching, veratrum viride, and a moderate amount of opium afterwards. One of these cases is perhaps worthy to place on record to see if there are others that are parallel with it. A young married lady of Brooklyn, a patient of Dr. Mitchill, attended a funeral on Sunday, two weeks to-morrow, of a young lady who died of metro-peritonitis. The post-mortem examination was made, and the funeral took place soon after. In the evening the lady referred to was seized with a chill, with a moderate amount of pain in the pelvic region, which pain, in the course of the next day, extended over the abdomen, and was attended with some tympanitis. Dr. Mitchill made the diagnosis of metro-peritonitis. At the time I saw the case the Dr. had been treating her with opium pretty freely, and with a good result. She has been convalescing now for more than a week. I should remark that she was not menstruating on Sunday, but that was the day that the menstrual flux should have returned.

It has occurred to me twice before (if this case be admitted to belong to that class) to see persons attacked thus during the menstrual period, and while they were attending upon puerperal fever. One of these occurred in private practice, the other in Bellevue. In one instance the patient was an unmarried lady, and in the other was a widow who had no children for several years before. In conclusion Dr. C. stated that there had been a similar case in St. Vincent's Hospital, under the observation of Dr. Finnell, and that Dr. Parker had also met with such a one a couple of years before.

Dr. Watson knew of two cases that terminated fatally.

Dr Blakeman stated that there had been a case reported within the last ten years in Bellevue Hospital where metroperitonitis was caused in a menstruating female by attendance upon another.

Dr. Metcalfe stated that he had seen a great deal of puerperal peritonitis, and did not recollect one instance where a nurse had been attacked. It was fair to suppose also that some of the nurses out of this number were menstruating at the time. If the disease under those circumstances was contagious, more than one case would have occurred in Bellevue Hospital in ten years.

Dr. Parker next related the following case: He was called in consultation by Dr. Mitchill, of Brooklyn, to see a young unmarried lady, about twenty-four years of age. The patient, a few years ago, had suffered from an attack of what was supposed to be inflammation of the pelvic peritoneum. She recovered from this, however, and went on enjoying tolerable health until within a month ago, when she was seized with the same set of symptoms as before. The inflammatory stage was passed through safely, and she began to convalesce.

On the morning of the tenth day, while turning over in her bed to reach something, she was suddenly seized with an intense pain in her abdomen, followed very soon after by great tenderness on pressure.

Dr. Mitchill was immediately sent for; on his arrival found her suffering very intensely, and late in the evening of that day Dr. Parker was sent for. When Dr. P. arrived she was suffering from all the symptoms of general peritoneal inflammation in a marked degree. Her pulse was 120, and there was some vomiting and hiccough present. It was evident from the history of the case that the inflammation was the result of the escape of some matter into the peritoneal cavity; but where that matter came from it was impossible to determine, inasmuch as there had existed no symptoms previously that pointed to trouble with the vermiform process.

Dr. Parker saw the patient in the afternoon of the next day, and she died at six or seven o'clock the next morning. At the last visit she seemed tolerably comfortable, her pulse was below 100, but still the vomiting and hiccough continued. The result of the autopsy showed the existence of peritoneal inflammation of the pelvic cavity, but more especially of the omentum, the meshes of which were matted together by the effusion of false membrane. The omentum also contained several abscesses, and it was the bursting of one of these that caused the relapse. Before Dr. P. saw the patient she had taken some verat. viride, together with anodyne injections to allay the pain. Under the influence of both these remedies the pulse remained about the same in frequency, 130, but the respiration deceased from 20 to 8 per minute. The use of both the remedies was then suspended for twelve hours, when the respiration came up to 20 as before, the pulse remaining unchanged. Thinking that the opium might affect the respiration, the verat. viride was used alone in doses of four or five drops, when the respiration again dropped to 8 per minute, while the pulse was the same in frequency as before. In conclusion, Dr. Parker remarked that he had never met with a case where the administration of the veratrum viride was attended with any such results.

Progress of Medical Science.

PREPARED BY DR. DESLANDES.

Discussion on Glanders.—The Academy of Medicine, of Paris, has lately been engaged in a discussion on glanders, in which Messrs. Bouley of Alfort, J. Guérin, and Tardieu have taken a prominent part. The whole of this discussion ran on the following questions put by Mr. Guérin: Cannot glanders exist in diverse and progressive degrees? If incurable in the last stage, has it not passed, before reaching it, through different phases in which it was curable? What are the causes which lead it to that ultimate and fatal stage? Lastly, What are the means by which it might be prevented from reaching that degree of incurability?

The remarks of the learned and witty professor of Alfort in answer to these questions are thus summed up by the editor of *L'Union Médicale.*

I. The competency of Mr. J. Guérin, as regards glanders, is questionable. II. Mr. Guérin fancied he saw cures where there were no cures. III. Mr. Guérin knows not that the slightest external symptoms of glanders indicate, to practised eyes, the most formidable internal lesions of the disease. IV. The clinical observation of glanders, with which Mr. Guérin is not familiar, demonstrates every day that these pretended diverse degrees of the disease do not correspond with the intensity of the general infection, and for those who know how to discern it, glanders exists already where there is to be found but the most superficial erosion under the ala nasi of a horse.

After Mr. Bouley has pronounced glanders incurable, it will not be without interest to read the two following cases translated from the *Gazette des Hôpitaux*:

Case I.—In April, 1859, writes Dr. Joufflet of Montrouge, I bought a thorough-bred mare, 7 years old, and apparently sound. One month after: pustules in the legs ulcerating; subcutaneous abscess, glands, œdema of the limbs. I took the mare in that condition to Alfort, where Mr. Reynal diagnosticated chronic glanders requiring slaughtering. No running at the nose, nothing there nor in the pharynx or the mouth.

I could not consent to such a sacrifice. Having informed my groom of the necessary precautions to be taken, I instituted a treatment. 75 grains of sulphur, twice a day, common salt, iodine, good diet. The subcutaneous abscess opened of itself; a degenerated ganglion formed an enormous vegetation. I removed it, and to combat suppuration I administered the fresh leaves of aconite; the animal was losing flesh. I continued this treatment for four months, aided by good diet: barley, wheat, oats; and to-day my mare looks so well, that I am beset by amateurs who want to buy her.

Case II.—One of my friends, adds our confrère, having a horse in the same condition, was going to have it slaughtered, as it did not eat. It was placed under the same treatment (injections, tincture of iodine, and sulphur at meals). After a few days the appetite returned, and with it the strength, etc.

Case III.—I have read, says Dr. Lesur in a letter to the editor of the *Gazette des Hôpitaux*, not without a lively interest, in your number of the 26th of June, a case of cure of glanders. A similar case having been met with by me in my practice, I consider it my duty to mention it to you.

Two farmers, father and son, contracted glanders from five horses affected with it. The father fell rapidly a victim to acute glanders. The son, whose disease assumed the chronic form, was placed under a mercurial treatment: calomel internally, cauterization of the pustules with the acid nitrate of mercury.

One month after the cure was complete, and there has been no relapse now for twelve years.

Nutrition of Bones.—Mr. Cl. Bernard presents to the

Academy of Medicine, in the name of Mr. Alphonse Milne-Edwards, the exposition of some experiments on the nutrition of bones.

Since the beautiful experiments of Chossat, we know that animals require for the continuance of their life, to inject every day into their stomach, besides alimentary substances properly so called, a certain quantity of mineral matter. This skilful experimenter proved that if this quantity of mineral matters come to fail the bones become thin and fragile, and the animal dies after a shorter or longer time. How does this destruction of the osseous tissue take place? Is it by resorption of the calcareous matter or by the entire disappearance of this tissue, cartilaginous matter and animal matter at the same time? This question, which Chossat did not try to solve by chemical analysis, Mr. Alphonse Milne-Edwards, son of the eminent Professor and President of the Academy of Sciences, has just endeavored to answer.

For that he had only to deprive for some time an animal of calcareous salts, then to find out by chemical analysis whether, under the influence of this diet, the bone had become poorer in inorganic matter, or whether its volume alone had diminished without any change in the relation of the elements to each other.

Mr. O. Milne-Edwards experimented on pigeons which he fed on wheat, rice, Indian corn, and decorticated millet-seed. At the end of three months of this diet, these animals were taken with diarrhœa and began to fail. The volume of their bones was much smaller than usual, they had lost about one-third of their weight. As to their composition, it had never changed, although they had been deprived of calcareous salts; hence we must conclude that it is not only the earthy matter which has been abstracted, but that there has been a resorption of the osseous tissue itself. These experiments confirm the opinion, that the osseous tissue is the result of a chemical combination of the organic matter with the phosphate of lime.

Regeneration of Bones.—Mr. Hamel read before the Academy a series of cases of regeneration of bones. Of the five cases I come to submit to the appreciation of the Academy, four, said he, are mine. The periosteum, as formative and regenerating organ of the osseous tissue, has obliterated a large perforation of the frontal bone, reproduced the right half of the lower jaw, the greater portion of an ulna, a portion of the body of a femur, lastly, almost the whole of a tibia.

At the time when osseous regeneration seemed a dream, although it had been the object that led Mr. Flourens to his researches on the periosteum, a man, 36 years of age, came to consult me for a perforation of long standing, near the left frontal eminence. The hole was nearly circular, large enough to pass the thumb through it, but thickset with asperities. There existed, as a consequence of this, a hernia of a portion of the brain and of the dura-mater. I advised him to apply permanently a piece of leather on the hole. Several years elapsed, the hernia at last completely disappeared. I had lost sight of the man, although we lived in the same city, when I was requested by the civil authorities to certify to his death—he had died from superficial cerebral hemorrhage, the result of a violent blow with the fist received in a fight. I remembered his old infirmity, and examined carefully the cranial cavity. To my great surprise, I found a whitish periosteal membrane of new formation, uneven, rather thick, of a cartilaginous appearance, applied on the dura-mater to which it adhered towards its centre. It was situated in front of the frontal perforation, whose rounded shape it had, and from which it must have been abruptly detached. The gradual but entire occlusion, the only admissible cause of the complete disappearance of the cerebral hernia, could not be but the result of a slow and reparative process. How it did take place would be difficult to explain. However it be, nature has shown, in this circumstance, how far her resources and her generative power can go.

In the second case (a necrosis of almost the whole of the left lower maxillary bone), the restorative power of the periosteum became apparent from the moment that the work of insulation was ended. The necrosed bone was entirely reproduced, the teeth only were wanting. The angle of the jaw remained less projecting, more receding; it gained in width and thickness what it lost in height.

A short time after this cure, a muleteer, 28 years of age, came to me with the left forearm rather painful and twice the natural size. In the middle of a suppurating wound, seventeen and a half inches in length (fifteen centimètres), stood half bare the necrosed body of the ulna. A fall from a horse, violent enough to produce at first an enormous and painful swelling, had induced a fistulous abscess about the lower third of the ulna, where its denudation took place. When I probed the ulcer, it was red, hard, and granulous. Although very extensive already, the two extremities of the bone were not visible. As it was movable at one point, I sawed it with a small, convex, watchmaker's saw, then with the circular saw of the trephine. The lower fragment detached itself a few days after, breaking in two. The fall of the upper fragment took place only three weeks later. On examining the internal surface of the periosteum, rugose and bleeding, I perceived that this membrane had become three times thicker and had acquired a strong consistency. Three months had hardly elapsed, when the patient, notwithstanding an imperfect cicatrization, used his forearm, whose volume was still larger than that of the other. The shape of the new ulna, where regeneration had taken place for a length of nine inches (eighteen centimètres), varied also in some parts. This twofold osseous reproduction is so much more remarkable that it took place in a country, the habitual hygienic conditions of which were very unfavorable to this reparative process.

Pierre Ravult, 14 years old, fell from a horse in April, 1859. This was soon followed by a deep fistulous abscess along the internal part of the right leg. At the end of nine months a fistulous tract left bare the necrosed tibia, and the first ulcer healed. When he came to consult me, in August, 1860, his leg was in a frightful condition, it had doubled in volume. The anterior portion was occupied by a deep ulcer with everted edges. The principal bone necrosed to the extent of ten and a half inches (twelve centimètres), was prominent in its middle, isolated from the soft parts, and saturated with a fetid and abundant pus.

The preservation seemed to me at first an utopia. I flinched at first, however, at the idea of amputating. After mature reflection I decided on waiting. The strength of the patient, instead of failing, had improved. To a vast local suppuration, disinfected by chlorine, was opposed an assimilation sufficient to replace the everyday losses. I favored it by the use of barks, wine, and ferruginous drinks, cod-liver oil, with iodine and a reparative animal diet. Under such conditions, and always preoccupied with an idea which, as it seemed to me, could be realized, I resolved on cutting, with the saw, on the projecting part of the denuded bone, as far as the medullary canal, and dividing it in three parts. I was in hope to render the fragments more movable, and to insulate them sooner from the periosteum, the reparative work of which I was afraid they might retard. The natural irritability of the subject, the capricious irregularity of the digestive organs, the too often repeated capillary hemorrhages, arrested my efforts, and answered but imperfectly the end I had proposed to myself. However, after the fall of two thick fragments, situated at the opposite extremities, the body of the tibia detached itself in its turn from its two articular epiphyses. From that time, January, 1861, the reparative process, long begun, pursued its progressive march; the osseous woof spread soft and spongy as it became more solid. I discovered no trace of a new medullary canal. I could study the metamorphoses which the new bone underwent until its entire development, as much in its aspect, its color, the saturation of its tissue, its gradual thickening, as in its greater force of consistency, always increasing, and more marked than before. There truly is revealed to the eyes of the observer the important part which nature has assigned to the periosteum.

American Medical Times.

SATURDAY, OCTOBER 19, 1861.

QUININE AS A PROPHYLACTIC.

That quinine is a prophylactic against malarious diseases is an established medical as well as popular opinion in many regions of our own country. The same belief obtains in other portions where malaria prevails to any great extent, and still practitioners who have little or no malarious diseases in their vicinity are quite ignorant of this fact. The Sanitary Commission has just issued an interesting circular recommending to the surgeons of the army quinine as a prophylactic against malarious diseases. The report is drawn up by **Dr. Wm. H. Van Buren**, of this city, who has had opportunities of testing the quinine; and as the facts which he presents, confirming the value of this agent, are of general interest to the profession, we shall notice them briefly. In many parts of the South and West the prophylactic employment of quinine is common by planters, for themselves, their families, their overseers, and negroes. Quinine is also used in our merchant service, on the Isthmus of Panama, and in vessels trading with other unhealthy ports, to prevent attacks of fever. The President of the Panama Railroad Company, **David Hoadley**, Esq., furnished the Chairman the following interesting statement: His attention having been called, in 1853, to the unusual amount of sickness which prevailed among the crews of vessels visiting Aspinwall, he was led to investigate the matter, and came to the conclusion that the regular habitual use of quinine by the crews, for a few days prior to the arrival of the vessels at that port, while in port, and subsequent to their departure, would remedy this evil. Accordingly, by the advice of a physician, he recommended the employment of wine and quinine made into a palatable mixture and called "wine bitters." This preparation was immediately placed on board of every vessel of the line, with directions for its use. The result we give in his own language:

"The result of this course exceeded our most sanguine expectations. From its very commencement a change for the better was seen, and during the last four years, in which seven vessels have been constantly employed in the trade, cases of sickness have rarely occurred—certainly not one case in ten, as compared with former times. The practice of using quinine, as above stated, is continued to the present day, and so uniformly healthy are the crews of our vessels that the subject no longer excites our solicitude. I would also remark that the use of quinine by the officers and employees of the company on the Isthmus has been found very beneficial, and in connexion with this, and the clearing and settlement of the adjacent country, Aspinwall has become one of the healthiest tropical ports of which I have any knowledge."

Prof. G. B. Wood, of Philadelphia, says:—"There is no prophylactic measure against the miasmatic fevers at all comparable in efficiency to the use of this medicine." **Dr. De Saussure**, of Charleston, South Carolina, believes that he has collected "a sufficient number of data to render the opinion plausible, if not conclusive, that quinine possesses power of protecting the white man from attack of intermittent and remittent fever, or its collaterals, when exposed for even long periods to malarious influences;" and he adds, "that its daily use is in no wise injurious to health, nor does its habitual use render the system insusceptible of its remedial powers." He mentions the following striking examples which came under his notice:—

"An overseer agreed to take charge of several rice plantations in one of the sickliest regions of rice culture, undertaking to spend the summer months on one of the plantations. He made no inquiry as to the health of the one chosen as his residence—it was selected from its convenient locality. When warned of the danger of his residing there in summer, he said he would never have the fever. His confidence in his capacity to resist malarious disease seemed unlimited. The result fully justified this confidence. He lived ten years or more in that neighborhood, spending every summer on the plantation, varied only by an occasional visit to the healthy pine land, where his family resided during the summer. He visited his rice fields without hesitation at any hour, day or night, that his business required. He never had an attack of fever during that time. I saw him after he had been there several years; a finer specimen of robust health it would have been difficult to find. It was ascertained on inquiry, that it was his habit to take quinine daily, during the summer, before leaving his house; the quantity he did not know, for he never weighed it."

"He was called in August to see one of the contractors on the Charleston and Savannah Railroad, laboring under a very severe attack of remittent fever, contracted during the superintendence of his contract between the Ashepoo and Combahee rivers, notoriously a very unhealthy region. During his convalescence he informed me that he would have to return to his work on the road, where he had a large number of hands employed (150); that they were negroes brought from healthy regions in North Carolina, and he expected all of them to be more or less sick, as they were entirely unaccustomed to a malarious climate. I advised him to take quinine daily himself, and to give it to all his hands, white or black. Late in the fall I met him in the city; he looked healthy and well. He thanked me for the advice I had given him; told me he had carried up some pounds of quinine; had used it himself daily, and compelled all his employees to take it also; that he himself had never had another attack of fever; that his health was better than it had ever been, and that not a single one of the 150 hands he employed had been attacked by fever. In fact, he said: 'The only case of sickness I have had was in a negro who had come from North Carolina sick.'"

Dr. Van Buren alludes to his own experience while on the medical staff of the U. S. Army in Florida. A serious outbreak of miasmatic disease occurred at the station, and the stock of quinine being exhausted, a substitute was prepared with whiskey, the bark of the common dogwood, wild cherry bark, and a small quantity of quinine, which reduced the number of relapses, and mitigated the attacks.

The British naval authorities have long been impressed with these facts, and have acted accordingly. **Dr. Bryson** states in the Navy Medical Reports (No. xv.) that—

"It has long been a standing rule in the Navy, enjoined by the 9th Article of the Surgeon's Instructions, that when men are to be sent on shore in tropical climates, to procure wood and water, or on other laborious duties, the surgeon, if he consider it advisable, is to recommend for each man, previously to his leaving the ship, in the morning, a drachm of powdered bark (Peruvian), in half a gill of wine, and the like quantity of wine after the mixture; or, if there be no wine on board, one-eighth of a gill of spirits, mixed with the fourth of a gill of water, is to be used in lieu of it; and the same proportion of each is to be given to the men on their return to the ship in the evening."

The British Army has been similarly provided, and the medical officers directed to employ quinine as a prophylactic. During the war of the Crimea, the Medical Director of the Army wrote as follows to the Inspector General of Hospitals:—

> "With reference to previous letters on the subject of administering quinine, and other preparations of bark, as prophylactic remedies, I have the honor again to draw your attention to the matter. From all I have learnt I am persuaded that the number of cases of fever would be diminished by such a course. So convinced am I, especially by the results of the experience of naval medical officers, of the benefits arising from the prevention plan, when followed in localities in which remittent and intermittent fevers are likely to prevail, that I have taken care to provide ample supplies of quinine in anticipation of every possible demand for that article. Having now at command sufficient of this drug, specially provided for that service, to furnish five grains per diem to every member of a force of 35,000 men, I beg you will take such measures as you think proper, with a view to induce the medical officers to employ that remedy, in the hope that it may prove useful in warding off attacks of fever, etc."

During the preparations for hostilities in China, in 1859, the Director-General issued the following order:—"That a stock of quinine wine be provided, in order that a ration of it be given to the men previous to and during the unhealthy months, or when the soldiers are required to proceed up the rivers, or on being encamped in the vicinity of marshy ground. A medical officer should be present when the quinine wine is issued, and to witness the same being drunk by the men."

The committee continue their quotations at length from medical writers and travellers, showing conclusively that quinine is the great prophylactic as well as curative agent in malarious diseases. The importance of this circular at this critical period in the history of our volunteer army can scarcely be over-estimated. The great majority of the surgeons of these forces have been little accustomed to the treatment of malarious diseases. The season has arrived when the progress of the war is to transfer large bodies of troops directly into regions where malaria exists now in the most concentrated form. Unless some prophylactic is employed, these malarious fevers will decimate our susceptible army in six months, and render it impotent against an acclimated foe. Haply it is in our power to shield those who go bravely forth to meet the exigencies of war, from one of those consuming forces which threaten the Northern soldier in his progress Southward, viz. malarious diseases. We cannot sufficiently commend the Sanitary Commission for its prompt recognition of the medical necessities of our troops, and the distinguished Chairman for the admirable and convincing manner in which he has presented this subject to the consideration of our authorities and the surgeons of the Army and Navy.

THE WEEK.

The recent Army Order, in which the Medical Director of the forces on the Potomac recommends that "Pirogoff's operation at the ankle-joint should be preferred to Chopart's, or to amputation above the ankle, in cases that might admit of a choice," has excited much interest among surgeons, and no little inquiry as to the relative merits of these operations. Pirogoff's operation is but little known in this country, having been performed too infrequently to give any reliable results. Indeed, the question has been so frequently asked—What is Pirogoff's operation? and it is so meagrely described in current surgical works, that we are induced to quote the description of the several steps as we find them given by the author himself in an English publication. It is as follows:—

> "I commence my incision close in front of the outer malleolus, carry it vertically downwards to the sole of the foot, then transversely across the sole, and lastly obliquely upwards to the inner malleolus, where I terminate it a couple of lines anterior to the malleolus. Thus all the soft parts are divided at once quite down to the os calcis. I now connect the outer and inner extremity of this first incision by a second semilunar incision, the convexity of which looks forward, carried a few lines anterior to the tibio-tarsal articulation. I cut through all the soft parts at once down to the bones, and then proceed to open the joint from the front, cutting through the lateral ligaments, and thus exarticulate the head of the astragalus. I now place a small narrow amputation saw obliquely upon the os calcis behind the astragalus, exactly upon the sustentaculum tali, and saw through the os calcis, so that the saw passes into the first incision through the soft parts. Saw carefully, or the anterior surface of the tendo achillis, which is only covered by a layer of fat and a thin fibrous sheath, might be injured. I separate the short anterior flap from the two malleoli, and saw through them at the same time close to their base. I turn this flap forwards, and bring the cut surface of the os calcis in apposition with the articular surface of the tibia. If the latter be diseased it is sometimes necessary also to saw off from it a thin slice with the malleoli."

It will be seen that Pirogoff's operation originally consisted in dividing the os calcis at right angles to its long diameter, and applying the cut surface to the articular face of the tibia, the malleoli being removed. More recently it has been slightly modified in various ways, as removing the articular surface of the tibia, dividing the os calcis obliquely from above downwards and forwards, etc. It will be seen that Pirogoff's operation is, in fact, the operation for ununited bones, the two cut surfaces being placed together for the purpose of obtaining union.

Such is Pirogoff's operation. Now, as to its absolute and relative merits, the author himself thus sums them up:—

> "1. The tendo achillis is not divided, and so we avoid all the disadvantages connected with its injury. 2. It also follows that the base of the posterior flap is not thinner than its apex, while the skin on the base of the flap remains ununited with the fibrous sheath of the tendo achillis. 3. The posterior flap is not cap-like, as in Syme's method, and its form is therefore less favorable to a collection of pus. 4. The leg after my operation appears an inch and a half (sometimes even more) longer than in the three other operations (Syme, Baudens, Roux), because the remnant of the os calcis left in the flap, as it unites with the inferior extremities of the tibia and fibula, lengthens them by an inch and a half, and, 5. Serves the patient as the point of support."

Much has been written for and against this operation. Several of the early cases were represented as terminating unfavorably by the death of the remaining portion of the os calcis, and its final separation. At one period, it was alleged that its projector had himself abandoned it. Recently, however, the statistics of the operation have been collated, and they give a more favorable impression of its value. Its mortality is fixed at about fifteen per centum, the rapidity of the cure equals that of other amputations, and the resulting limb is undeniably the best that can be obtained for direct use.

An English Bishop has determined to examine all candidates for holy orders who appear before him to prove their fitness for church duties by reading or preaching in his presence. The *Lancet* suggests that this examination should take place before the candidate commences his studies, and that there be added to the examiners medical men of experience and judgment.

"In such a probationary examination as we suggest, the importance of medical scrutiny must be obvious. There is many a short-breathing, weak-voiced clergyman now getting through his Sunday services by great exertion, who only needed early counsel and proper training to render him capable of bearing easily a far heavier strain upon his physical powers. The 'clergyman's sore throat,' which medical men know so well, is almost always attributable to ignorance of the proper method of using the voice. It is unknown amongst actors, and rarely affects really eloquent preachers and speakers, because they recognise the importance of obtaining proper and intelligent control over the instrument by which they display their power. In the case of any candidate rejected under the new test proposed by the Bishop of Rochester, we cannot but think that, on the present system, he has been subjected to a most flagrant injustice. His years have been wasted, his money spent, and his best energies taxed to the utmost—all in vain, because no means were taken to gauge his capabilities before he began his fruitless labors."

The following sketch of the dwellings of the poor in Dublin by Mr. Nugent Kennedy, has its parallel in New York:—

"Out of a population of 249,000, 50,000 at least reside in a fœtid and poisonous atmosphere. The dwellings of the poor are chiefly confined to about four hundred and fifty lanes, courts and alleys, and about sixty streets. The entrance to most of these courts is very narrow—a sort of great stenchvalve or overground sewer. As a general rule, there is a green slimy stream oozing from a surcharged and choked-up cesspool, through which the visitor is compelled to wade: the stench from this ooze is intolerable. In a tottering house, in an alley like this, the deformed offspring of a narrow street, the working man is forced to dwell. If he is unable to pay two shillings a week in a street, he must live in a court or alley for ninepence or a shilling. A large number of the houses set in tenements are three stories high. In many of them, the stairs are so crazy as almost to render it unsafe to go up or down. The yard accommodation is atrocious. In some districts, where the houses are built in blocks, there is none whatever. Some of the cottage tenements are, if possible, more unhealthy than the houses; the ceilings are lower, and the light wretched. In many instances I found the boards rotted away, and the inmates sleeping on the damp ground."

The Surgical Section commences its session on Friday evening next at the residence of the Chairman, Dr. James R. Wood. The regular meetings will be held on the third Friday evening of each month. This Section was one of our most active Societies during the past year, its meetings being largely attended, and its discussions of the most practical character. The subject of Diseases of the Joints and their Treatment was most thoroughly discussed by this society, and a large amount of material collected for a future report. New subjects of great interest to the practical surgeon will be brought forward during the coming winter session. The invitations are widely extended to the profession, and many practitioners from other cities and the country, temporarily in the city, have passed a pleasant and profitable evening at the meetings of this Section, to which they are always heartily welcomed by its hospitable Chairman.

The anticipated early movement of the Army of the Potomac, excites great anxiety on the part of the medical profession of the States with reference to the preparations of the medical department for the pressure that may be made upon it. Gen. McClellan has indicated his desire for enlarged hospital accommodations, and the time is evidently near at hand when a different, larger, and better class of hospital provisions should be provided for the Army of the Potomac.

Reviews.

On the Origin of Species by means of Organic Affinity. By H. Freke, A.B., M.B., M.D. T.C.D., M.R.I.A., Fellow of King and Queen's College of Physicians in Ireland, etc., etc. "Nothing is advanced in this publication that is not perfectly in harmony with the Mosaic record of Creation."—Preface. London: Longman, & Co., Paternoster Row. 1861.

"Dust thou art and to dust shalt thou return." This is the law. The author of this remarkable little treatise gives us the formula. We had prepared an abstract of the argument, following the author's arrangement, for our readers, but both on account of its unavoidable length, and because we think that by altering that arrangement we can present his views more concisely, and at the same time more clearly, we have concluded to substitute a condensed general view.

The work consists very largely of extracts from former writings of the author, contributions to the Dublin Medical Press, and a work on Organization, and does not, therefore, present the same regular sequence that it would do if entirely written as a whole.

We may divide the objects of the treatise into two: First, an inquiry into the present ultimate constitution of organic matter; and second, a deduction from this as to its origin. Its fundamental idea is that the ultimate molecules of organic life, animal or vegetable, visible under the microscope, and known to physiologists as cytoblasts, cell-germs, etc., are physiologically indivisible, and are therefore properly to be called organic atoms, holding the same relation to the organic world that the theoretical atoms of inorganic nature sustain to matter at large. As chemical affinities exist between the latter, so, it is claimed, organic affinities exist between the former. So that we have the same right to expect that the result of these affinities will be to produce a symmetrical living being in the one case as a regular crystal in the other. Our readers will recognise in this idea the analogy so carefully elaborated by Schwann in his chapter on the "Theory of Cells," in which he ably maintains the *Physical* in opposition to the Teleological view of development. The function of these atoms is to elevate matter in the scale of organization, while, at the same time, they reproduce a plurality of like atoms. They are, therefore styled, and we like the designation very much, "Organizing Atoms." The matter which they have thus elevated in the scale of organization, is termed "The *organized Residual Product*" of each species of atom. We have examples of them in lignin or woody fibre, and albumen in the vegetable, and in fibrine in the animal. These "*Residual Products*" act as the nutriment, or as he prefers to call it, the "*specific stimulus*," of the organizing atoms next in order above them, without which stimulus they will not perform their function. Thus we have a regular series, the lowest species of organizing atoms finding their stimulus in inorganic or mineral matter, upon which they confer the lowest degree of organization, thus not only repeating themselves, but producing the stimulus for the next higher species, and so on, until we arrive at a point, both in the vegetable and animal, where resident products are elaborated, above which there are no organizing atoms. What then is the function of these highly organized products? In the vegetable creation they subserve the uses of the animal creation. In the latter, their function is to manifest the phenomena of animal life. And now follows a very subtle and beautiful distinction between vegetable and animal life. The author supposes the function of the atom to be exerted, by radiating its organic force upon the surrounding matter, just as a heated body radiates its caloric; and as a fluid, placed in a solid freezing mixture, parts with its caloric, and itself becomes solid, while the freezing mixture, on the contrary, becomes fluid, so he conceives the atom to part with its organic vitality while it converts the matter around it into an organized cell, or elevates it to its own level. In conferring life the atom itself dies. This process goes on in both animal and vegetable. In both, the atoms die in childbirth. The residual products, however, in the vegetable kingdom do not thus die; they are stored away, year after year, or fall beneath the laws of chemical disintegration. Not so in the animal. Here the residual product finds its noble function in evidencing the phenomena of animal life, motion, sensation, thought, and in its discharge, likewise dies. Thus in the vegetable we have *organic* life at the expense of *atomic* death; in the animal, *organic* life at the expense of atomic death also, but, in addition, *animal* life at the expense of *productral* death. All life, therefore depends upon death. Not only are we made to feel with the Apostle, that "In the midst of life we are in death," but going a step further, we must admit that the moment we cease to die, in that moment do we cease to live.

We think that we have thus put our readers in possession of the author's opinions, with regard to the present constitution of organic life. We shall now reproduce, as briefly as possible, his views as to its origin founded upon them. We have a right to suppose, in fact we know, that, in the organic, as in the inorganic world, the number of species of atoms is comparatively few. We have, for instance the muscular atom, the vascular atom, the nervous atom, etc. Now these typical atoms being few, and the residual products being likewise few—how can we account for the immense number of species in both plants and animals? Simply by the difference in the number and arrangement of the atoms, and hence of the productral tissues in the different species. These compound atoms, representing the ovule of the future individual, or the original embryonic germ of that species of animal, have been formed under the influence of organic affinities, of which we are as yet ignorant, and hence the idea of the "Origin of Species by means of Organic Affinity." Each simple atom is a living being, descended from its parent, which in like manner acknowledges an ancestry of its own species. Why should we not follow up this heraldic tree until we come to the parent trunk, which would be the first atom of that species as it came from the hand of the Creator, just as we trace the myriads of the human race back to the original pair, not, we hold, as the author has it, to a "*single Graafian vesicle*," for a single Graafian vesicle could give existence to but a single individual to provide the specific stimulus, for the compound embryonic atom provided by the first would be useless, as the author has himself shown? Organic matter then, as originally created, was simply a collection of organizing atoms or granules, few in number, one for each species, which the author conceives might, if brought together, have constituted a comparatively small granule. This granule (or granules) was "*the embryo of organic creation*," "*one parent* of all since existing organic creation; *its other parent* being as I conceive a mineral or inorganic world."

This conclusion is substantially the same as that arrived at by Darwin, viz. that all organic creation has sprung from a single primordial cell; and the author claims, with some justice, that the fact of two investigators arriving at the same result, the one by analogy and the other by induction, and acting entirely independently each of the other, entitles that result to a very respectful consideration.

He concludes with an earnest and spirited protest against the tendency of many good men to stigmatize as infidel every scientific theory which does not fully accord with their interpretation of the revelation of scripture, and disclaims any attempt on his own part to establish a result at variance with its true interpretation. There are points in the work, with reference to the original creation of atoms, etc., which present great difficulties to our mind, and which we wish had been touched upon more fully. But the extreme interest and great ingenuity of the argument are beyond question.

A PRACTICAL TREATISE ON THE DISEASES OF THE SEXUAL ORGANS OF WOMEN. By F. W. VON SCANZONI, Professor of Midwifery and Diseases of Females, in the University of Würzburg, etc. Translated from the French of DRS. DOR and LOCIN, and annotated with the approval of the author, by AUGUSTUS K. GARDNER, A.M., M.D., Professor of Clinical Midwifery and the Diseases of Women, in the New York Medical College, etc., etc.; with upwards of Sixty Illustrations. New York: Robert M. DeWitt, Publisher. 8vo. pp. 669.

IN giving to American physicians the masterly treatise by SCANZONI, done into good English, DR. GARDNER has accomplished an undertaking for which he deserves the thanks of the profession. His publisher also has done nobly in bringing out the volume in a superior style of typographical elegance, notwithstanding the disastrous times.

The volume is strictly a practical treatise on Gynecology, and in its succinct account of the pathology, symptoms, and morbid anatomy of maladies of the uterine organs, we find every form of those maladies lucidly described, and a rational therapeia suggested. The subject matter of the treatise is systematically arranged, and every question is discussed in a scientific manner, particularly as respects symptoms, pathological anatomy, and the etioloy.

As most of our readers will doubtless read the book for themselves, we need not enter upon an extended analysis of contents. But we would briefly remark, that all the more frequent and important forms of uterine disorder are fully discussed, while the more rare and occult are carefully investigated in the light of the latest pathological researches. As a guide to the practitioner, and a work of philosophical merit, we heartily commend this treatise to the profession.

Correspondence.

DR. PETERS'S RENUNCIATION OF HOMŒOPATHY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—A few words only in reply to Dr. Peters's "Vindication." I disdain all feeling of "vindictiveness," with which I am charged; there is neither cause nor motive for any such feeling on my part. Our interests do not clash in the least; and whatever may have fallen from my pen which might seem unkind, may find its true explanation in a jealous regard for the honor, dignity, and *status* of a noble profession. Dr. P.'s "Renunciation" would never have elicited a single remark from me had it been full, candid, and unconditional; as it was, it really seemed, and indeed was, only a *quasi* renunciation, a semi-apologetic defence of the fundamental principle of homœopathy, professing a hesitating willingness to abandon it, provided the profession would accept his apology, while it left him free to practise "either system," as interest or choice might dictate. It was against this attempt at riding two horses at the same time that I protested; while it was acknowledged that there was but one horse in the ring. I am ready, after suitable probation ("by their fruits shall ye know them"), to fraternize with any respectable homœopath, who has been regularly educated to the profession, who will satisfy me that he has fully renounced all the peculiar dogmas of the homœopathic school, and made himself sufficiently acquainted with the recognised doctrines and principles of true medical science. As Dr. P. now states that he "is prepared to renounce *all of homœopathy*, except that which the regular profession has already, or may in the future adopt," I have nothing more to say, as he now stands on true scientific ground, and it remains to be seen whether he consistently and openly maintains it. If he refuses to consult with homœopathists, and repudiates the dogma "*similia*," conforming to the code of ethics of the "American Medical Association," it will be the duty of regular practitioners to recognise him as a member of the medical profession, and accord him the merit and *status* to which he is legitimately entitled.

Contraria Contrariis.

RESULTS OF TIGHT LACING.

[To the Editor of the American Medical Times.]

Sir:—When we breathe we take into the chest, or inhale, and give out, or expire, a certain quantity of air, which can be measured by breathing through a curved tube into a bell glass full of water, inverted over a pneumatic tub. Dr. Herbst, of Göttingen, has lately been performing some curious experiments in relation to the quantity of air that is breathed. Now the commonest understanding will appreciate from them the value and comfort of full and unrestrained breathing. Dr. Herbst says, that a middle-sized man, twenty years old, after a natural expiration or emission of air, inspired or took in eighty cubic inches, when dressed, and one hundred and six when his tight dress was loosened. After a full dilatation of the chest, he inhaled one hundred and twenty-six cubic inches when dressed, and one hundred and eighty-six when undressed. Another young man, aged twenty-one, after a natural expiration, took in fifty while dressed, and ninety-six when undressed.

Had Dr. Herbst made his observations on some of the ladies, who carry the use of corsets to extremes, we apprehend that he would have obtained results of a nature really alarming. If the wheel of fashion which revolves even more rapidly than that of fortune itself, would but bring up something oriental in costume, it would go far towards perfecting the objects of our journal—the public health.

At the Hotel-Dieu, the great hospital at Paris, a young girl of eighteen lately presented herself to M. Breschet for his advice. On the right side of her throat, she had a tumor of variable size, but never bigger than one's fist; it reached from the collar-bone as high as the thyroid cartilage (called in common language, Adam's apple), when pressed downwards it wholly disappears, but returns as soon as the pressure is removed; it is indolent, soft, and elastic. It is observed to be largest when the chest is tightly laced in corsets. In short, by placing the ear on it, the murmur of respiration can be heard in the tumor, which proves that a protrusion of the lungs has taken place; or in other words, that this poor girl has been laced so tightly that her lungs, having no longer sufficient space in their natural situation, are squeezed out of it, and are forcing their way up along her neck.

D. J. Lyster, M.D.

Brooklyn, N. Y., October 9th, 1861.

FOREIGN CORRESPONDENCE.

[Letter from David P. Smith, M.D.]

DUBLIN.

May 16.—Saw Mr. Wilde and Dr. Stokes. I was particularly struck with the remarks of Mr. Wilde upon the unanimity of feeling which characterized the profession in Dublin. He said that in most instances, if not all, those who had become noted for anything were supported and confirmed in their special aims by the rest of the profession, and that instead of publishing marvellous reports and questionable procedures to bring grist to the mill, there was nothing of the sort known. The profession was too honorable and too high socially to descend to any such thing. Men uncouth in their manners and anything but pleasing, had been, for their sterling worth, placed by their professional brethren in positions of influence and affluence.

May 17.—Mr. Wilde's clinique that I visited to-day appears to be very capitally conducted. I have seen no place, not even excepting the clinique of M. Sichel, that gives more facility for the study of eye and ear diseases. I saw many cases of almost entire destruction of the eyes, resulting from the Irish famine years ago. Purulent ophthalmia of young children I observed was treated by a leech at the external angle and a purge of calomel. Ulcers upon the cornea were touched by a camel's hair brush dipped in solutions of argenti nitras, five and ten grs. to the ounce. A case was shown of congenital absence of one meatus auditorius externus, the other ear being perfect. A lad of about fifteen years was brought by his father, who, supposed to be deaf and dumb, had recently evinced signs of hearing, and make attempts at speech.

May 18.—I accompanied Dr. Stokes to-day in his rounds of the Meath Hospital, and saw much to interest me, which, however, can hardly be expressed on paper. The rapidity with which Dr. Stokes seizes upon the chief points of a case, the ease with which he gives to each symptom its appropriate place and importance, his wise discretion in dealing with physical symptoms, and the readiness with which he adapts his remedies to the varying conditions and requisites, must be seen to be appreciated.

May 20.—This morning I visited the lying-in hospital now under the charge of Dr. Alfred H. McClintock, who stands very high in this city as a scientific man. In going with him around the wards of this munificent charity, I saw much reason to admire the care and tact with which he appreciated the wants of, and ministered to each case. In conversing upon puerperal fever he remarked that the opiate plan of treatment had not been successful in his hands; that he placed more reliance upon leeches than anything else, but that the disease assumed so many forms that he thought it wrong to generalize upon the treatment. I observed, however, in going the rounds that every patient that had had any considerable soreness in the abdomen had been well leeched, had taken castor oil and turpentine by way of a purge, and blue pill, digitalis, James' and Dover's powders *pro re nata*. He called my attention to several cases where pelvic cellulitis, arising from puerperal peritonitis, was slowly resolving under this treatment. He insisted upon the necessity of carefully examining the groins in every case of retarded recovery after accouchement, because the stimulants and tonics and gentle exercise, prescribed under the idea of no local lesion, made the suppuration of these pelvic intumescences certain.

The utmost care is used in this Charity to prevent infection. The beds in which the women lie-in are made of straw, in order that they may be destroyed after once using. It is found that the mental emotions have the greatest effect upon the women here confined, for, as the Master remarked, a woman will have got through her travail excellently when her aunt or sister will come in, telling the poor woman that her husband has been drinking, or some such agreeable intelligence, and then disease sets in. In fact, it has been necessary to have no one admitted, except by permission obtained in each case, and those permissions are usually restricted to the husband and mother. Mental distress has such an effect in inducing disease that it is found that those who are unhappy at home or are unmarried are the ones to take puerperal fever. Dr. M'Clintock's views upon mammary abscess are somewhat peculiar. He thinks it arises from irritation of the nipple more frequently than from any other cause, and is best treated by cooling evaporating lotions. I was shown a case where on the vulvæ there appeared to be two Hunterian chancres, but on passing the finger a little higher the great mass and induration of the disease caused one to immediately exclaim carcinoma. A case was shown me as a caution against the careless use of the tampon. The woman said that some years ago a tampon had been applied for three months with daily changes, to check profuse hæmorrhage. Several months after that, having been admitted to this hospital on account of the continually recurring hæmorrhage, one day a clot was observed in the os uteri, which being removed was found to be formed upon a shred of cloth. Dr. Stokes called attention to the fact that you often obtained the first indication of returning health after fever from auscultation of the heart. A case was shown where pressure was being constantly made upon an abdominal aneurism by way of experiment. In a conversation with the conservator of the museum of the Royal College of Surgeons here I was told that any other treatment than that by pressure, of external aneurisms, had in Ireland been entirely given up. He showed me the cast of an aneurism of the posterior tibial, where pressure applied in the morning had, by the same evening, resulted in a cure.

May 22.—Mr. Wilde to-day performed extraction in a very masterly manner. He was most particular in his avoidance of pressure, and allowed much time to elapse between each step of the operation. He remarked that a continental surgeon, who was once present at a very protracted operation of his for extraction of a dislocated lens, after the completion of the procedure with safety to the eye, complimented him, saying that he *knew how to wait.* Two cases were then subjected to linear extraction, which a week previous had had the cataractous lenses broken up by the needle. They were easily evacuated, thus saving much time, and also the expense of keeping them in the hospital.

May 21.—This morning I heard Mr. Colles lecture at Stevens' Hospital upon disease of the knee-joint. He did not seem very favorably disposed towards resection, but seemed to think that anchylosis might be obtained by rest and careful position as well as by excision. In going the rounds of the hospital with him, I saw many cases most interesting, which my limits forbid my mentioning. At seven P.M. I went to the Lying-in Hospital to hear a lecture from Dr. M'Clintock. It was on the condition of a woman after delivery, and was replete with information. I was pleased that the *nervous shock* so disregarded by authors was fully noticed, and declared to have repeatedly produced death in this institution. Dr. Butcher showed me to-day some of his cases at Mercer's Hospital. One of the most interesting was that of a girl about ten years of age, from whom he had removed full six and a half inches of the whole diameter of the shaft of the left femur, before new bone had formed. Every endeavor was made to preserve the periosteum, and extension was kept up, and now the little sufferer has a serviceable limb but little shorter than normal. Another case was shown me where much necrosed and carious bone had been removed from both the upper and lower portion of the tibia. So extensive had been the removal of bone that splints were required for the solution of continuity, but the result was a perfect limb. I was present some four or five years ago at an amputation of a leg, performed on account of the utter destruction of the lower part of the tibia by this disease. Had the true nature of the affection been recognised early in this case, and free incisions made, and perhaps the bone trephined, I have no doubt the young man would have saved his limb.

May 24.—Mr. Wilde's infirmary presented to-day many cases most instructive to the observer. He mentioned the practical fact that leeches at the outer angles of the eye did not occasion the œdema always following leeches upon the under eyelid. If I have not already described a curious disease of the appendages of the eye, I will now. A patient will present himself with all the outward appearances of purulent ophthalmia, and yet, says Mr. Wilde, an abscess of the outer angle of the eyelids occasions all this, and a free opening of it relieves all the symptoms. A case of meningitis was shown me, having got nearly well under the use of the bi-chloride of mercury. Inasmuch as it followed close upon syphilitic iritis, Mr. Wilde judged it to be syphilitic.

Mr. Robt. W. Smith showed me to-day in the Richmond Surgical Hospital several very interesting cases. One was exsection of the knee, in a female of middle age, performed four months ago. Sufficient osseous union has taken place to render the limb inflexible, but a profuse discharge is rapidly wearing the patient out. Recovery in this case is very doubtful. I was struck with the very great pains with which the professor dressed the limb, taking particular care to prevent protrusion forwards of the lower end of the femur. A case of flat foot was then shown, which was placed in an apparatus of Prof. Smith's invention, the essential part of which is a pad worked by a screw, which, the rest of the foot being firmly held, presses firmly against the os scaphoides, compelling it to occupy its proper place. Prof. Smith said that one week's wearing of the apparatus would restore the foot to its proper shape, and a few weeks' perseverance in its use accomplish a cure.

[Letter from C. Y. Swan, M.D.]

PARIS.

Sept. 6, 1861.

As M. Maisonneuve has written but little, he is consequently but little known beyond his wards. He is now over fifty years of age, was formerly attached to the Hospital Cochin, but for the last five years has held a service in the Hospital la Pitiè. His bald held is very round and large, forehead immense, eyes large and brilliant, nose turned up, mouth decidedly non-classic, chin double, and underneath a string of whiskers which come from each ear not unlike a cap strap. He is of low stature, and by the size of his abdomen is rendered somewhat ungraceful. In manners, exceedingly rough, is clear and forcible as a speaker, and as an operator, there never was one who could torture poor sick humanity with more perfect sang-froid than he. For example, who but he could smilingly circumvallate so tender an organ as the eye, with six or eight *flèches*, each cruel spike driven firmly to the orbit's base, and no anæsthesia thought of.

> "Who can all sense of others' pains escape,
> Is but a brute at best, in human shape."

I forgot to state in my last letter that the *flèches* were, *perhaps*, first introduced by a surgeon of Lyons. There is no one thing probably which better exemplifies the "progress of surgery," than the present management of fractures. With what uncouth lumbersome machines the unfortunate patients used to be encased, and how bedridden they got, whereas now, the dressing is so light, strong, and safe, that the man with a broken leg walks in the garden. Our New York surgeons, though, seem not yet all to appreciate this style. They revere antiquities; and I will venture to say that there are more of the old clumsy fracture apparatus, now used in the three New York Hospitals, than in all of the sixty-two like institutions of Paris.

The modern substitutes for *planks*, etc., are of course familiar to you. Dextrine, gelatine, caoutchouc, plaster of Paris, are all in vogue. The last-mentioned is evidently the best, for it has been under trial since the time of the elder Larrey, who, it is said, first used it; and to this day it stands the most popular. The methods of application have naturally changed as experiences accumulated. Larrey, for instance, moulded the limb in it—others put on a saturated circular bandage—others again dusted the powdered plaster over wet bandages—others still applied it with a trowel as on a wall; and so on to the end, or rather, until the arrival of Maisonneuve. The question is now settled, and all other modes are obsolete. M. Maisonneuve had once the good luck to receive a fracture of the leg, and so this method he first planned on his own person.

For example and explanation, let us suppose a broken tibia. He orders four coarse cloths, longer than the leg, and each so broad that when folded three or four times, they will be respectively reduced to a breadth of from two to four inches—the breadth, of course, varying with the limb under treatment. After these cloths have thoroughly soaked in the fluid plaster, they are taken dripping from the vessel, and directly applied along the sides of the limb. The lower ends of three of them embrace the foot and lap intimately on the sole. The front one passes on the dorsum to the toes. A circular bandage, saturated or not, is then quickly rolled up to the knee and perhaps down again to the foot. When this bandage has not been soaked in the plaster, the apparatus is called *demi-plâtre*. In five minutes after everything is solid. The liquid splints have become firm, and every point is supported with an impartiality heretofore unapproached.

Unless when the soft parts are greatly injured, M. Maisonneuve often applies this apparatus immediately, or may be one day after the accident. This seems unsafe, and indeed I have sometimes seen most discreditable results. However, if any trouble is suspected of existing, there is no apparatus, as a permanent one, that can afford a more easy approach to the limb. And the debarrassment need be only *partial;* for after the removal of the bandage one splint, two splints, or only part of a splint, can be readily taken off, and the remainder stands firmly to its duty. If the parts thus exposed require washes, such can be used with impunity. The splints are not easily softened. In like manner are treated almost all fractures—femur, patella, clavicle, etc., etc.

A great many have failed to have success with this procédé of Maisonneuve, and it has been often because the cloth used was too *fine*. Some coarse material is the thing, such as old coarse hospital sheeting. The solution of plaster should be as thin almost as milk.

The lectures in the "progress of surgery" continue. In my next letter I will try to describe something *actually* new—namely, a urethrotome.

Army Medical Intelligence.

MEDICAL STATISTICS AT FORT MONROE.

[Army Correspondence of the American Medical Times.]

The reports of the medical officers of the Department of "South-East Virginia, &c.," for the month of August, 1861, show a general improvement in the health of the troops. Fall fevers are increasing; other classes of disease show generally marked diminutions in the number of cases. The following are the figures:—

Sept. 1, 1861.—Strength of command—officers and enlisted	7361
Remaining sick on last report of regiments reported here	480
Taken sick during the month of August	2847
Sent to the General Hospital	54
On furlough	12
Discharged on Surgeon's certificate	77
Deserted	1
Died	7
Returned to duty	2734
Remaining sick, 197; and convalescent, 245	442

The cases of death were:—enteritis, 1; fever typhoid, 2; fever continued, common, 1; gastritis, 1; cirrhosis, 1; casualty, 1. These include Lieut. E. S. Holbrook, Mass. Battalion; one sergeant from 2nd N. Y. Vols.; one sergeant from 20th N. Y. Regt.; two privates from 1st N. Y. Vols.; one private of 1st Vt. Vols.; one private of 7th N. Y. Vols.

Classes of Disease.

Fevers	254
Diseases of organs connected with digestive system	1146
" " respiratory system	207
" " brain and nervous system	108
" " urinary and genital organs, and venereal affections	113
" " fibrous and muscular structures	226
Abscesses and ulcers	222
Wounds and injuries	202
Diseases of the eye	40

Leading diseases:—Diarrhœa, 718; rheumatism, acute and chronic, 209; constipatio, 212; fever congestive, 33; fever continued common, 23; fever intermittent quotidian, 66; fever intermittent tertian, 50; fever remittent, 51; fever typhoides, 5; other fevers, 26; rubeola, 1; dyspepsia, 37; colica, 28; cholera morbus, 24; gastritis, 30; tonsillitis, 19; bronchitis, 72; phthisis pulmonalis, 5; pneumonia, 4; pleuritis, 11; cephalalgia, 63; ictus solis, 3; syphilis, primitive, 7; syphilis, consecutive, 23; orchitis, 16; gonorrhœa, 47; abscesses, 44; phlegmon, 80; incised, contused, and lacerated wounds, 90; gun-shot wounds, 11; contusio, 28; debilitas, 34; ophthalmia, 17; other diseases of the eye, 23.

The Medical Purveyor's office at this post is in good supply of drugs and medical stores.

Dr. R. B. McCay, of Penn., who has been acting here as a surgeon, under contract since June last, has just been commissioned as a Brigade Surgeon, and assigned to this division for duty.

Charles B. White,
Assist. Surg. U. S. A.

Fort Monroe, Va., Sept. 17, 1861.

RECRUITING FOR THE NAVY.

[Naval Correspondence of the American Medical Times.]

The receiving ship "Ohio," at Boston, Mass., receives all the recruits for the navy enlisted at the rendezvous in Boston, also from the rendezvous at New Bedford, Mass., and Portsmouth, N. H. By the Naval Surgeons Brinckerhoff, D. S. Edwards, and M. G. Delaney, all of these recruits are examined, and again re-examined on arriving at the receiving ship, by Surg. Chas. Martin and Assist. Surgeons W. K. Scofield and J. H. Macomber. The examination is conducted according to Sect. 37 of "Instructions for the Government of the Medical Officers of the Navy of the United States," which is as follows:—"Surgeons of rendezvous, or on recruiting service, will be particularly attentive in the examination of recruits. They will cause each recruit to be stripped of all his clothes, to move about, exercise his limbs in their presence, in order to ascertain whether he has free use of them; that his chest is ample; that his hearing, vision, and speech are good; that he has no tumors, ulcerated or extensively cicatrized legs, rupture, chronic cutaneous affection, or other disorder or infirmity, mental or physical, which may render him unfit for the active duties of the navy. They will ascertain, as far as practicable, whether the recruit be subject to convulsions of any kind, or has received any contusion or wounds of the head which may preduce occasional insanity. With any of these defects the man will be rejected. Attention will also be paid as to whether or not the recruit exhibit satisfactory evidence of vaccination or palpable exemption from variola; that the unprotected may be immediately vaccinated by the surgeon of the vessel to which the recruit may be transferred. No person will be received into the service without having previously undergone the necessary inspection; nor will pensioners from the Naval Asylum be allowed to enter for general service."

Large numbers of trained seamen are entering the service, who are a valuable acquisition to the country in the present crisis. The navy promises soon to have more able seamen in it than the navy of France or Engladd. The number of recruits received on the "Ohio," during the months of July, August, and September, was 3,090, being an average of about thirty-nine daily. The daily average number of men belonging to the ship during the same period was 716, and the daily average sick list, eleven.

Cases of rubeola, or any contagious disease, or any case of disease or injury of a serious nature, or which is likely to last for some length of time, are transferred to the United States Naval Hospital at Chelsea, under care of Surg. J. L. Fox, and Assist. Surg. H. M. Wells. According to the new Naval Register of Aug. 31, 1861, there are in the United States Navy, eighty-five surgeons, eight passed assistant surgeons, and sixty-six assistant surgeons. There are also twenty-seven acting assistant surgeons in the volunteer navy.

W. K. Scofield, M.D., U. S. N.

Receiving Ship Ohio, Boston, Mass.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture III. Part II.

Cavernous Signs obtained by Percussion.—The varieties of Tympanitic Resonance, called Amphoric and Cracked-Metal Resonance.—Pleximeters and Percussors.—Rules to be observed in the Practice of Percussion.

Gentlemen:—I come now to speak of the signs obtained by percussion in cases of advanced tuberculosis. The signs peculiar to this stage of the disease are those which denote cavities. There are certain signs obtained by percussion, as also by auscultation, known as cavernous signs. In speaking of them, I shall be led to describe two varieties of tympanitic resonance of which I have not yet spoken. They are generally considered as distinct signs, but it seems to me appropriate, and it answers every practical purpose, to regard them as varieties of tympanitic resonance. I shall not introduce patients into the amphitheatre to illustrate the cavernous signs, but I shall reserve these for illustration at the bedside in our visits in the wards.

What evidence is furnished by percussion of the existence and situation of cavities? If in a case of advanced tuberculosis, we find a purely tympanitic resonance at the summit of the chest, on one side, within a circumscribed space, we may suspect strongly the existence of a cavity, or of cavities, in that situation. But the proof is not complete, for this resonance may be due to solidified lung, the tympanitic sound coming from air in the bronchial tubes. If we find on percussing a consumptive patient repeatedly, within the same circumscribed space at the summit of the chest on one side, sometimes tympanitic resonance and sometimes marked dulness or perhaps even flatness, we may conclude, with much positiveness, that a cavity exists in that situation. The fluctuations in the results of percussion show a cavity (or cavities) sometimes filled with liquid and sometimes empty, *i.e.* containing only air. The proof, however, is still not absolutely complete, for it is possible that, assuming the tympanitic resonance to be due to solidified lung, the same fluctuations may be caused by the bronchial tubes being sometimes filled with morbid products and sometimes empty.

The sound obtained by percussing on the upper part of the chest in front has, sometimes, not only a tympanitic quality, but a musical tone resembling that produced by filliping the cheek made tense by the separation of the jaws, as in the trick of imitating the sound of water pouring from a bottle. This is amphoric resonance, one of the varieties of tympanitic resonance. This term, amphoric, has been adopted by writers on physical exploration to denote sounds having a musical intonation. The term is applied to the resonance obtained by percussion, whenever it is musical, and, as we shall hereafter see, it is also applied to breathing sounds which have a musical tone. The sound produced by percussing over the lower part of the chest on the left side when the stomach is distended with gas, is frequently musical, or amphoric. So in certain cases of pneumo-hydrothorax, this variety of tympanitic resonance is observed. It is also sometimes produced by percussing over tuberculous cavities. But, exclusive of pneumo-hydrothorax, it does not belong exclusively to cavities. It may be produced by percussing over solidified lung. I have met with it repeatedly in cases of pneumonia affecting the upper lobe. The sound, in these cases, must come from the air in the bronchial tubes. It may also be produced by percussing over a portion of lung solidified by tubercle, but I think this is extremely rare; so that I regard amphoric resonance, in advanced tuberculosis, existing within a circumscribed space at the summit of the chest, as quite conclusive of the existence and situation of a cavity.

The other variety of tympanitic resonance is the cracked metal sound, or, as the French term it, the *bruit de pot fêlé*, the sound of the cracked pot. This is a *chinking* sound, such as is produced by folding the hands loosely and striking them forcibly upon the knee, as in the familiar trick with children to produce a sound as if pieces of money were concealed between the palms. A similar sound is sometimes produced by percussing over cavities, and the mechanism is in both instances the same; in the trick with the hands, the sound is caused by the forcible expulsion of air through the crevices between the fingers, and in the chest it is caused by the forcible expulsion of air from cavities into the bronchial tubes.

Is the cracked-metal sound proof positive of the existence and situation of cavities? It is not. The sound may be produced over solidified lung in pneumonia, as well as in cases of tuberculosis, and, in children, over healthy lung. I have met with it many times in pneumonia, and in the case of a child which served to illustrate this sign for a long time to clinical classes, the lungs were found, after death, to be free from disease, an enlarged bronchial gland lying beneath the primary bronchus on the side on which the sound existed. Still, in the great majority of the instances in which it exists, it is due to cavities, and may be considered as generally indicating their existence and situation. Excepting when due to cavities, it is observed only over or near the situation of the primary bronchus, and it is much more likely to be found in children than in adults, when cavities do not exist, in consequence of the greater flexibility of the costal cartilages in early life, the force of the stroke thus more readily expelling the air from the bronchial tubes.

Percussion, with a view to elicit the cracked-metal resonance, is to be performed in a peculiar manner. One or two blows, at a time, only, should be struck, and the blows should be stronger than in ordinary percussion; the patient should be requested to keep the mouth open, and not to hold the breath. I have often remarked this fact: the cracked metal resonance continues for a short period during an examination, but after the blows have been repeated a number of times, it ceases and cannot be reproduced until some time has elapsed.

Of the cavernous signs obtained by percussion, we may say that they do not possess very great practical value. They require certain physical conditions which are by no means uniformly present when cavities exist. For the tympanitic resonance, and its two varieties to be produced, the cavities must be empty, and their walls must be rigid enough to prevent them from collapsing when empty. They must either be very near the surface of the lung, or the lung between them and the thoracic walls must be solidified. For the cracked-metal resonance, the cavities must communicate by several free openings with the bronchial tubes. The absence of these signs, therefore, is no evidence against the existence of cavities. Moreover, they occur when there are no cavities, and the diagnosis of tuberculous disease, at the stage when cavities are formed, is sufficiently easy and positive without any regard to the cavernous signs.

I have now, gentlemen, considered as fully as the shortness of my present course will permit, the signs obtained by percussion. It remains to say a few words respecting the instruments which may be employed, and certain rules to be observed in the practice of this method of exploration.

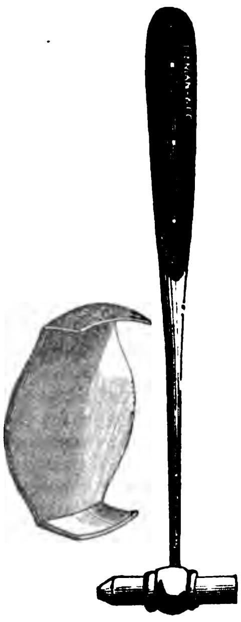
First, of the instruments in practising percussion. When this method was introduced by Avenbrugger, the strokes were made with the fingers directly upon the chest. This is called immediate percussion. You will be surprised to find how well this will answer; but, undoubtedly, there are advantages in using some intermediate substance to receive the blows. The medium is called a pleximeter, and mediate percussion is the term used to express the fact that this instrument is employed. The blows may be given by means of the fingers, or some mechanical instrument called a percussor. Now, what instruments shall we use as a pleximeter and percussor? In answer to this question, I have no hesitation in saying that nature has endowed us with a pleximeter and percussor admirably suited to the purpose. We apply the palmar surfaces of the fingers of the left hand to the chest, and we strike with the fingers of the right hand, as you have witnessed in this place and in the wards. The advantages of these instruments are: they are always at our command; they render the examination less formidable, especially to children; the fingers applied to the chest are more readily and better adapted to its irregularities than any artificial pleximeter, and the sound, when the percussion is well performed, is derived almost exclusively from within the chest, the latter, as we shall presently see, constituting the excellence to be sought for in artificial instruments. In addition to these advantages, the fingers give us some incidental information which is of value. In striking upon the fingers placed on the chest, if the lungs retain their normal elasticity, and the costal cartilages are flexible, we feel a certain amount of yielding of the thoracic walls. But if the lung be solidified, or the pleural sac contain liquid, we feel a sense of resistance, which denotes that there is something interfering with the yielding which belongs to health. This comes, properly, under the head of palpation, but we obtain the information simultaneously with that derived from the percussion sound. So far, then, as the relative merits of different instruments are concerned, there is nothing to be gained by using any but the hands. If, however, you percuss much, you may find a serious inconvenience arising from soreness of the dorsal surfaces of the fingers used as a pleximeter. Several years ago I was obliged to resort to other instruments for this reason.

Various instruments have been contrived as substitutes for the fingers. A disk of ivory, bone, or india rubber, is generally used as a pleximeter. The one which I use is composed of hard india rubber; it differs from those in common use, in the length of the auricles. They are of large size and roughened on their exterior aspect, so as to be easily and firmly held by the fingers of the left hand.

Of percussors I have three varieties before me. One consists of a small metallic ball encircled with a ring of india-rubber, and attached to a small elastic handle of whalebone. I have no doubt that this instrument answers very well, but I prefer a handle which is rigid, not elastic. Another is the instrument known as Winterlich's hammer. It consists of a pretty heavy piece of metal, with a cone of india-rubber inserted into it, attached to a flattened handle with spaces hollowed out to receive the ends of the fingers. This instrument is intended to be used by throwing up the hammer to a certain height, and allowing it to fall upon the pleximeter. It seems to me that the force of the blows can be better estimated if they are made directly and entirely by muscular action, and, if used in this way, the hammer is too heavy and the form is inconvenient.

For several years I was in the habit of using a hammer of steel (with a cone of india rubber inserted) considerably smaller than that of Winterlich's instrument, the handle being round and of a convenient size for striking directly upon the pleximeter. One difficulty which I experienced with this instrument was, the india rubber cone frequently became loose and fell out, or it became too much compressed and required to be renewed. To obviate this difficulty, and to secure more completely the great object in a percussor, viz. to bring out a sound which shall, as exclusively as possible, come from within the chest, the instrument which you see me use habitually, was contrived and made, at my suggestion, about a year ago, by Messrs. Tiemann & Co., of this city. It consists of a hammer composed of india rubber in the form of a double cone. This is firmly fixed in a metallic ring at the centre of the cone, attached to a handle of convenient size and length. It is, in fact, a double hammer, one end of the cone being smaller than the other end. This instrument seems to me to leave nothing to be desired, as regards weight, form, durability, etc. It produces, moreover, as little sound as possible, exclusively of that coming from within the chest. You will perceive that, in the latter respect, the smaller end of the cone is preferable to the larger end. I strike successively with the two ends, and it is evident that a greater share of the sound with the larger end comes from the contact with the pleximeter and not from within the chest.

The percussor and pleximeter used by the writer are figured in the following wood-cut.



I shall detain you but a few moments with what I have to say on the rules to be observed in the practice of percussion. In general terms, the object is to percuss successively on corresponding situations on the two sides of the chest, and in all respects as equally as possible, on the two sides. The finger, or the artificial pleximeter, is to be similarly placed on each side; if one side, horizontally, or vertically, so on the other side, and if on the rib or in the intercostal space on one side, so on the other side. In percussing, as many as five or six blows in rapid sucession are to be given. This is to obviate any disparity arising from differences as regards the expansion of the two lungs in different stages of respiration, and, also, differences arising from the manner of percussing. When a series of blows are struck, the mind unconsciously perceives the average or mean, not the sound produced by any one blow. In all cases in which a delicate comparison between the two sides is to be made, we should stand directly in front or behind the patient. You will find it to be extremely difficult to make percussion equally, in all respects, upon both sides if you stand upon one side.

Percussion as applied to the abdomen I shall not consider in my present course, but reserve this subject for consideration in connexion with clinical instruction here and in the hospital wards.

STATISTICS OF THE DISEASES OF THE 10TH REGIMENT NEW YORK VOLUNTEERS, STATIONED AT FORTRESS MONROE, VIRGINIA.—The Surgeon, J. W. Hunt, M.D., furnishes the following report for the quarter ending September 30th, 1860:—Total mean strength for the three months, 2120; number treated, 1312; no deaths. Among the diseases we notice; intermittent fever, 10; remittent, 23; diarrhœa, 552; bronchitis 76; Rheumatism 68; incised wounds, 37; ophthalmia, 13; Otitis, 17; debility, 24; hemorrhage, 11.

BENZINE AS A REMEDY FOR SCABIES.—During the last five months, I have used benzine in seven cases of itch, and with perfect success; one application having proved sufficient. Three cases (one very severe) occurred in the same family. Three ounces of the fluid were supplied, with directions to sponge every part of the body with it where any rash or itching was noticed. This was done in the evening, and the whole was used. The application was not repeated; and after a month there had been no return of the disease. —*Mr. Godfrey*, *Brit. Med. Journal.*

Original Communications.

REMARKABLE

CASE OF HYDATIDS OF THE LIVER,

UNUSUAL SYMPTOMS—RECOVERY.

TRANSLATED FROM THE FRENCH OF THE UNION MEDICALE.

By DR. P. F. C. DESLANDES.

The peculiar predisposition of the liver to become the seat of those singular beings called acephalocysts, is a fact which has long been observed. All remember the ingenious explanation which M. Cruveilhier gives of it. The materials which this organ receives from the vena porta, become mixed with the non-assimilable elements susceptible of an individual life; these elements stop in preference in the right lobe, germinate there, and develop the individual. This being the case, the very tissue of the liver would be a true seed bed of hydatid germs which would be brought there by the current of the vena porta. Be that as it may, it is certain that the liver is of all organs that in which acephalocysts develop themselves most frequently.

The following case is interesting for many reasons:—For the errors of diagnosis in which two skilful and experienced physicians, along with the writer of this note, have fallen; for the unusual symptoms of the disease; for the admirable means employed by nature to save the patient; and, for the profession itself of the patient, one of our most talented young confrères, and from whose notes we write this case.

The evolution of the disease may be divided into three periods: one during which the disease progresses silently, showing its presence only at long intervals; a second characterized by the non-interruption of the symptoms which go on aggravating incessantly, until the crisis through which nature triumphed over the disease; and lastly a period of repair. The first symptoms of the disease appeared in the month of August, 1856. At that time Dr. X——, our patient, was twenty-four years of age, and *élève externe* in one of the Paris hospitals, when, in one of his visits, he was attacked with violent pains in the epigastrium, constant, without exacerbations, without particular extensions. It was an excruciating sensation of tearing, increasing at every motion, and accompanied with abundant perspiration. After suffering a quarter of an hour, the patient was going out of the hospital, dragging himself along with difficulty, bent like an old man, when he felt in the abdomen a violent peristaltic action of the bowels, followed by rumbling, and the pain ceased as if by enchantment. The next day, the conjunctivæ and the skin assumed a slight jaundiced tint; the urine had also a bilious shade. Two or three days after, everything had disappeared. From that day to the month of August, 1860, there was nothing worthy of note. Our young friend was very muscular, with broad shoulders, strongly built, enjoying uninterrupted good health. The epigastrium presented only a slight convexity, but on percussion it gave the stomachal sound. At this period, Dr. X—— was again taken suddenly with pains like the first, but which lasted longer and were more violent. Ten drops of laudanum of Rousseau calmed them in a few minutes. They were followed by a marked icterus, which again lasted only a few days, but was this time accompanied by a dull pain in the epigastrium. After this, the patient enjoyed as formerly perfect health, and attributed the symptoms experienced until then to the expulsion of small hepatic calculi; a supposition rendered still more probable by his very bilious temperament. In January, 1861, he was attacked with a new hypatic colic, which, however, calmed rapidly by the laudanum of Rousseau, but it was followed this time by a rather intense icterus which lasted about a fortnight. Alkaline baths and Vichy water was the treatment adopted by the patient, who, moreover, did not think it necessary to give up the practice of his profession. This was followed by eight or ten days of perfect health, accompanied, however, by a slight painful sensation in the region of the liver, which rendered motion difficult. A slight icturus made its appearance, and simultaneously with it wakefulness and anorexia. The patient diagnosticated a congestion of the liver; ten leeches were applied on the epigastrium, and under this treatment all these symptoms rapidly disappeared. His health was perfect until the 12th of March. During that time, the patient continued the alkaline treatment *intus et extra*. This last time a new colic, which began with violent pains in the shoulders, was accompanied by vomiting, lasted several hours in all its intensity, and which did not yield to laudanum (perhaps on account of the vomiting), and moderated only after the application of ten leeches. It continued, thus mitigated, until the evening of the next day. Ten new leeches brought on an almost complete calm. The icterus, which had reappeared with the pains, diminished for two or three days, and the patient was enabled to drive out. This amelioration was of short duration, and on the 13th of March Dr. X—— was entirely confined to his bed.

These are the symptoms which he then presented: Intense icterus; urine dark and scanty; difficult micturition; face discolored; dull epigastric and hepatic pains, sometimes increased spontaneously or by any movements of the trunk; volume of the liver slightly increased; epigastrium sonorous on percussion. Soon the hepatic colics reappeared, but this time they were indeed excruciating from their violence and duration. For twenty-four hours they did not cease a moment, and threw the patient into an inexpressible state of physical and moral depression. During this colic our poor confrère was a prey to hallucinations which made their appearance as soon as he closed his eyes. These hallucinations, of a strange and dismal character, were attributed to frictions on the painful regions with a strong ointment of belladonna. We will only mention the most remarkable: Dr. X—— thought he saw one of the circles of Dante's Inferno. This vision, which lasted several minutes, was magnificently lighted, and had gigantic proportions. By the advice of M. Béhier, formerly the master, then the physician of the patient, the latter took every two hours grs. ⅓ of extr. gum. opii. The pains were allayed, and the hallucinations assumed a pleasing and agreeable character. After this followed a few days of comparative calm. The patient was obliged to keep constantly on his back; he experienced an invincible repugnance for food, and was tormented by a sleeplessness which opium alone combated successfully. Never before had the icterus been so intense.

The alkaline treatment was continued. The colics became less and less frequent and violent. They yielded easily to opium grs. j. or ij. Without disappearing completely, the icterus diminished. The patient was much emaciated and weakened; could, for eight or ten days, take every day a few hours' rest in an arm-chair, read a little, and took some light food. He still had dull pains in the epigastric and hepatic regions, accompanied at times by sharp shootings, radiating often to the shoulders. There was almost complete aphonia and perpetual wakefulness. A firm belief in an approaching death was the only moral phenomenon observed. About the 15th of April the scene changed. One morning the following phenomena appeared: Violent chills, which lasted twenty minutes, followed by a hot stage which lasted two hours, and during which the pulse was 120. An abundant perspiration terminated the febrile stage, during and after which the patient felt an acute splenic pain irradiating to the left shoulder. The right side was most painful. Ten grains of sulphate of quinine seemed to increase the pains, but the next day there was no fever. It returned the following day, in the evening, but without chills, lasted two or three hours, and ended in profuse perspiration. The splenic pain persisted, and the icterus had reappeared more marked than ever. Suppuration of the liver was feared, for the attending physicians were far from suspecting the cause of all these disorders, and eighteen small issues were made with the *pâte de Vienne* on the regions of the liver and of the stomach; at the same time the patient was taking a potion gommeuse with grs. ij. of calomel; the emaciation became frightful. No alimentation possible; no sleep. April the 22d, the condition of the patient becomes suddenly worse; the fever was ardent and continued (pulse 134), although a dose of sulphate of quinine was administered every day; however, this medicine seemed to moderate the febrile paroxysms of the evening. Constipation, until then obstinate, became invincible; the abdomen became distended and very painful, particularly in the right iliac region. Another very acute pain was felt in the right lateral thoracic region, on a level with the liver. The patient could only drink a few gulps at a time; it seemed to him that the capacity of his stomach was reduced. He soon was taken with vomiting; each effort was accompanied with horrible pains. The epigastrium, then much more prominent, gave, on percussion, an obscure sound; on palpation offered a certain resistance. In the evening the patient, in a condition desperate in his own eyes and ours, took a dose extr. gum. opii, and fell asleep. At one o'clock in the morning he awoke, much astonished at not experiencing any longer sharp pains, although the abdomen continued distended; the fever had ceased also.

The next day the use of opium was continued (grs. ½ every two hours). In the evening there was a febrile exacerbation, rather moderate, and an abundant perspiration. The drinks were borne in considerable quantity. In the morning of the following day, after most painful efforts, there was a passage of hard fæces, discolored, followed by an enormous quantity of soft colored fæces, among which we perceived a transparent bag, having the appearance of a parent hydatid, and which, when distended with liquid, must have been about the size of a man's fist. This evacuation much relieved the patient, and changed the scene as if by a fall of the curtain. The distension of the abdomen disappeared; the pain in the iliac region decreased, as also the fever, which returned daily. The sulphate of quinine was continued and taken under the form of injection. The patient perceived then that the epigastric swelling had been replaced by a depression. From this moment everything went on improving, and to-day (June the 19th) Dr. R., who has nothing left of his disease but the remembrance, strolls among the rocks of his native Brittany.

Biliary calculi; difficult passage of these calculi through the ducts; hepatic colics; then secondary inflammation of the liver, diffuse suppuration of a certain part of that organ; imminent death; certain death—such were constantly the diagnosis and prognosis of this terrible affection. If you read carefully the above case, described *de propria sensione* by our confrère himself, you will be convinced that it was next to impossible to form another opinion. Thus viewed, this case deserved to be related, were it only to avoid, in similar occasions, these errors of diagnosis. What circumstance could have led to diagnosticate an hydatid in the left lobe of the liver, a cyst pressing on the biliary ducts, and perhaps on the gall bladder itself, arresting the course of the bile, inducing phenomena of obstruction similar to those produced by biliary calculi, bringing on around it symptoms of inflammation, producing adherences between it and the transverse colon, perforating that intestine, rushing into the canal, carrying everything before it in its passage, and thus bringing about a cure as original as it was unexpected?

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Health Officer for the City of Melbourne.—The Corporation has issued a notice inviting applications from legally qualified practitioners, for the office of Health Officer. The appointment will be for six months; the salary, £100. Applications must be addressed to the Right Worshipful the Mayor, endorsed "Health Officer," and sent in before twelve o'clock on the 17th inst., to the Town Clerk's office. —*Med. Record.*

Reports of Hospitals.

NEW YORK HOSPITAL.

FIRST SURGICAL DIVISION.

J. L. LITTLE, M.D., HOUSE SURGEON.

Three Cases of Varicocele successfully treated by the removal of a portion of the Scrotum.

Various methods of treatment have been recommended for the radical cure of varicose veins of the spermatic cord, —the ligature, caustics, excision, and pressure—all with a view to the obliteration of the diseased vessels, but all these means have one great disadvantage; they so frequently lead to phlebitis, that the surgeon often hesitates to risk the operation, and falls back on the palliative treatment, lotions, the suspensory bandage, and purgations.

Sir Astley Cooper, in his work on the testes, published in the year 1830, suggested the removal of a portion of the scrotum for the cure of this disease. In this work he states that "the removal of a portion of the scrotum will lead to a diminution of the veins of the spermatic cord, and it is an operation in an extreme enlargement, accompanied with pain which might be tried with perfect safety, and is very likely to succeed." In a paper published in Guy's Hospital Reports, 1838, he gives the history of four cases in which the operation had been performed, and with complete success. In all these cases the portion of scrotum removed was from the diseased side only. This operation was first performed in this hospital about fifteen years ago, by Dr. John Watson, who, instead of removing a portion of the scrotum from the affected side, removed more than one half of the entire scrotum by a semilunar incision, and the parts were thus caused to assume a more uniform appearance after the operation. This has been about the only method of treatment used in this institution since that time, and it has always been successful, and in no case has any trouble after the operation been experienced.

The advantages of this operation are: 1st, The remaining scrotum acts as a suspensory bag supporting the testicles, and preventing any undue distension of the vessels. 2nd, The inflammation excited during the healing process, though generally slight, in some cases is sufficient to cause the obliteration of some of the veins, without the same risks as attend the direct application of the ligature to the vessels themselves.

Case I.—Patrick White, aged 23, native of Ireland, was admitted Aug. 6, 1860 (Dr. Watson, attending surgeon), with a well-marked varicocele on the left side. Patient stated that about two months before admission he began to suffer from a dull dragging pain extending from the testicle along the spermatic cord to the back and loins, and then for the first time discovered his disease. The scrotum on examination was found in a very relaxed condition, and on the left side very pendulous. The varicocele was very large, and on manipulation gave the ordinary sensation of a collection of earth-worms. It was ordered to place himself in the recumbent position, and immediately on doing so the swelling disappeared. Pressure was then made by the fingers over the external abdominal ring, and patient directed to rise, and the swelling immediately reappeared, thus showing that no hernia existed.

Aug. 7.—Patient was etherized, and the testicles pushed well up against the abdominal ranges, the scrotum was then seized, and held between the blades of a pair of curved œsophagus forceps, and a large portion removed by a strong pair of curved scissors. On removing the forceps the remaining portion of the scrotum immediately retracted, exposing the testes and their coverings. The hemorrhage during the operation was slight, requiring the application of only three or four ligatures. The edges of the scrotum were then approximated, and retained by sutures and adhesive plaster. Four days after the operation the sutures were removed, and about one-half of the wound was found to have healed by primary union. The remaining portion healed by granulation without any untoward symptom. The scrotum after the operation was apparently just large enough to contain the testicles, no room remaining for varicocele or hernia. Patient was discharged cured.

Case II.—Andrew N——d, aged 34, seaman. This patient was admitted July 5, 1860, with a varicocele of the left side causing him much inconvenience by the dragging pain, and preventing him from fulfilling his duties as a sailor. Dr. Parker, the attending surgeon, removed about one half of the scrotum, exposing both testicles and their coverings; the fibres of the cremasteric muscles were plainly seen. The edges of the wound were retained in apposition by sutures and adhesive plaster, and cold water dressings applied. The wound healed without any untoward symptom, and he was discharged cured. On May 11, 1861, this patient was readmitted into the hospital with a small abscess in the groin. He stated that there had been no return of the disease, and he had experienced no inconvenience since the operation.

Case III.—Hermann Marange, aged 20, admitted December 10, 1859 (Dr. Parker, attending surgeon), with a large varicocele of the left side. He had suffered from this disease for several years, and complained of a severe pain in the part when walking or exercising. Has been in the habit of wearing a suspensory bandage. His general health is poor. On December 20, patient was etherized, and a portion of integument from the *left side of the scrotum* was removed by Dr. Parker; wound was closed by sutures and strips of adhesive plaster, and cold water dressings applied. The wound healed by primary union, with the exception of a small point in the centre, which healed by granulation. One month after the operation he was discharged cured. About the middle of last August, one year and a half after the operation, he presented himself at the hospital. He states that he had had no return of the disease. The parts were examined, and on the left side the scrotum was just large enough to contain the testicle. On the right side the scrotum was lax and hung behind, and considerably below the left. The unsightly appearance of the parts was the only bad feature in the case, and he expressed himself as willing to undergo the operation of having a piece of the scrotum of the right side removed in order to have the parts look well. This might have been obviated had an equal portion been removed from both sides, as in the other two cases.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

RUPTURE OF THE UTERUS.

1. *Simple Rupture of the Uterus by a Strain; II. Supposed Rupture; III. Three Cases of Rupture; in the first delivery was effected by forceps, in the second and third by version.*

I. Dr. G. T. Elliot related the following case of ruptured uterus. A woman was admitted into Bellevue Hospital in the ninth month of pregnancy, and in a moribund condition. No history could be obtained. The abdomen was emphysematous on the right side below the umbilicus, and the cervix uteri dilated so as to admit two fingers. The pulsations of the fœtal heart could not be heard. The woman stated that she had flooded at the eighth month, and begged not to be touched. She died in about half an hour after her admission. It was then ascertained that, while lifting something, she was suddenly seized with sharp pain and vomiting. She was then seen and deserted by several physicians, when others were called in who sent her to the hospital. A post-mortem examination was held, and the uterus found ruptured, the fœtus, enveloped by the amnion and chorion, lying loose in the cavity of the peritoneum. There was also intense peritonitis, and clots of blood were found lying in the peritoneal sac.

II. Dr. T. F. Cock related the following case, in reference to a point in diagnosis. He was called in consultation the evening before to a lady who was taken in labor with her third child. The Doctor told him that the labor had progressed very well from seven A.M., until about twelve o'clock at noon, when the patient began to grow very weak, complaining of pain in the abdomen. Dr. C. found the pulse very weak, and the patient very much depressed. She had been vomiting profusely. In answer to a question from him, the physician in attendance stated that a catheter had been introduced, and some bloody urine drawn off. On examination of the abdomen two tumors were discovered which were quite distinct from each other, one reached up in the median line as far as the umbilicus, and seemed to be the uterus, while the other swelling seemed as if it were composed of some parts of the child that had escaped through the rent in the walls of the organ. The attending physician was inclined to think that there was no rupture, inasmuch as there had been no sudden cessation of pain nor recession of the head. Right or wrong it was evident that something should be done to relieve the woman. Failing to deliver by the forceps the perforator was used, and after the head was delivered, with a good deal of difficulty, it was necessary to twist a towel around the head and neck of the child, and bring to bear all the force at command to deliver the body. The uterus afterwards contracted perfectly well. In conclusion he asked the members if the case was one of rupture of the uterus or whether there was a mistake on his part in the diagnosis. He stated that he had seen seven or eight cases of rupture of the uterus, and in all of them the organ had been firmly contracted after delivery. He did not know of any other cause for bloody urine in early parturition save rupture of the uterus into the bladder.

In answer to a question from Dr. Parker he stated that he had met with one such case before.

Dr. Watson recollected one case where such a rupture was produced by instruments which were drawn through the uterine wall in front, and so into the bladder.

Dr. Blakeman asked if it was not possible that the catheter might have injured the bladder.

Dr. Cock did not think such was possible, as the instrument was a flexible one.

III. Dr. Elliot stated that he had seen three cases of rupture of the uterus within the past month (Oct. 1860). The first patient, like all the others, had been going on with natural labor, the presentation was natural, the pelvis well formed, and there was no remarkable uterine effort. They were all three multiparæ, and two of the cases occurred within forty-eight hours of each other; two died, and the third was alive up to the end of the ninth day. In all three the labor pains stopped suddenly, and coincidently sharp pains were complained of. From the moment of the cessation of the pains of labor there were no more uterine contractions until after delivery. All the children were dead.

The first case occurred in Bellevue Hospital. I was sent for early in the morning, and on my arrival I found the woman very much collapsed. Delivery was affected by the forceps, the uterus contracted well, but the vomiting, which previously existed, never ceased, and she sank within twenty-four hours. At the post-mortem examination, made fourteen hours afterwards, the house physician, by passing his hand into the abdominal cavity, found that his fingers penetrated the cavity of the uterus, through a laceration at about the junction of the vagina and uterus. Blood escaped from the incision into the abdomen.

The second case was seen about a fortnight after. I found Dr. Bishop and Dr. Sweeny tending the patient. The woman was collapsed, and apparently moribund. There was marked anterior uterine obliquity. Really her condition was such that I thought that she would live longer if left alone. The advice that I gave caused me to be very anxious during the night, but in the morning I was gratified to find, by a note sent me, that reaction had come on. I went immediately down to the case, and though the reaction did not amount to much, I proceeded to deliver. A vaginal examination disclosed the existence of a laceration which involved the vagina and posterior wall of the uterus, a rent of such size as to admit the hand much more readily than a fully dilated os uteri. The hand introduced through this opening readily reached the posterior wall of the uterus, and the fœtal head was found partially within the uterus and within the abdominal cavity to the right of the lumbar vertebræ. I delivered her with ease by version, the uterus contracted down well, and the patient lived fourteen hours afterwards.

That night I was sent for again in consultation by Dr. Sleeven to a woman who presented all the characteristic symptoms of ruptured uterus. I did not find her as collapsed as the others. Vaginal examination before delivery appreciated a partial longitudinal fissure of the uterine cervix on the left side, not extending through the tissues, and leaving me in doubt whether or not actual rupture of the womb had taken place. After delivery of the patient by version, however, it was found that the hand introduced *in utero*, would allow two fingers to pass readily through a laceration to the left of the uterus until they reached the peritoneal lining of the abdominal wall. While held in this position the other hand applied upon the abdomen enabled me distinctly to appreciate that nothing but the abdominal wall intervened. In this case I performed version, and happening to strike the feet first I brought them down; the head, however, became caught with the chin up against the left portion of the ilium, and would not pass. I then introduced a blunt hook, and broke the jaw afterwards performing craniotomy. Two ounces of the tincture of ergot were then given, when her husband and mother were told that she would die. Dr. Elliot visited the case the next day anticipating a fatal issue, but was agreeably surprised to find the patient doing well; the same was the case up to the ninth day, the last time he saw the patient.

Dr. Markoe referred to a case of ruptured uterus that he met with, which terminated fatally within one hour after he was called to it.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

Treatment of Acute Dysentery by Ipecacuanha.

On page 28, of the present volume of the Medical Times, will be found a brief summary of the employment of large doses of ipecacuanha in the treatment of dysentery, gathered chiefly from reports published in the Madras *Quarterly Journal of Medical Science*. It is there stated that the evidence seems strong in favor of this remedy in the treatment of acute, uncomplicated cases of a sthenic character, and that to such cases time and experience will no doubt eventually limit its employment. Another number of the same journal comes to us rich with interesting matter, among which we find an elaborate report on the same subject, by Surgeon-Major A. Blacklock, Physician to the Madras General Hospital, from which we derive further evidence of the efficacy of this treatment when applied with that scientific discrimination upon which alone the merits of all remedial agents must eventually stand. Out of forty-one cases of dysentery occurring in the hospital ten were selected for the ipecacuanha treatment, all of which recovered. These cases were all acute, and of a sthenic character, three were comparatively slight, and treated one entirely by ipecacuanha, one by ipecacuanha and hyoscyamus, and one by ipecacuanha after a dose of castor oil and laudanum. The remaining seven were severe cases, in which ipecacuanha was essential at the commencement, but would for a time become inadmissible, from the type of the disease changing to the asthenic, when tonics were substituted, with such other treatment as each individual case required. After a full report of each of the ten cases, the author proceeds to consider the other remedies used, and the part they played in bringing the disease to a successful termination. Acute dysentery can seldom be successfully treated by any one remedy; but no single remedy, nor combination of remedies, will so soon bring the system into a condition favorable to the restoration of healthful function to the diseased intestine, and so surely obviate the necessity of bloodletting, as large doses of ipecacuanha, if administered in the first stage of the disease. He considers venesection to be objectionable, and local depletion only valuable as such, when from the anus; it being the only place where direct communication exists between the cutaneous and intestinal capillaries, and leeches, when applied here, afford at the best but temporary relief. Plethora, he concludes, is occasioned not so much by too great an amount of good blood, as by retained blood-waste, and, instead of lessening the amount, let the whole mass be filtered and cleared of impurities, secretion and nutrition restored by the employment of such remedies as stimulate all the organs in due proportion, instead of throwing too much work upon the liver, causing the abraded intestines to be irritated by an overflow of bile, or risking a tedious convalescence in consequence of the debility we have induced by diminishing the bulk of the vital fluid. These evils are best obviated by large doses of ipecacuanha continued until the sthenic stage is produced, *and no longer*. One sign of depression which will always contra-indicate the employment of any lowering measure, is the green feculent discharges, always indicating a low condition of the vital powers, and generally best treated by some astringent salt of iron, wine, and nourishing diet. The tr. ferri sesquichloridi played an important part in most of the cases reported, administered after the acute stage is subdued, and given in sufficient doses to serve as a tonic to the heart, as a restorer of hematin, and consequent stimulant to the pulmonary respiration, and as a depurator by its action on the kidneys. At the same time a diuretic composed of tr. camph. co., tr. opii, nitric acid, squill and tr. lyttæ was administered at night. Real amendment, he says, never begins till free diuresis is established, a point not sufficiently insisted upon by writers; and the above mixture not only promotes this object, but has also a diaphoretic action. Quinine was found to be necessary in some instances when the fever became remittent. The diet, he thinks, should be more liberal than is usually allowed in acute dysentery, for if the veins are supplied with healthy nutriment, they will not absorb the filth and poison from the diseased body of the patient; we thus prepare our patient for a more speedy convalescence. The period of convalescence under this treatment as compared with any other course is decidedly shorter, although he cannot make a reliable comparison. He concludes, however, "that a high place in the therapeutics of sthenic dysentery must be awarded to ipecacuanha."

Substitute for Quinine.—In the same journal L. W. Stewart, Esq., Medical Officer, Nilgherries, suggests the use of two preparations of the Barberry, the tincture and the alkaloid barberine, as a substitute for quinine, owing to the great price and the growing scarcity of the latter drug. The tincture, in small doses, is a valuable astringent and tonic, containing a large amount of soluble matter, in the shape of tannin and barberine, and has been found useful in dysentery and malarious fevers. Dr. O'Shaughnessy claims to have found it useful in ague and remittent fevers, and our author, having used it for upwards of four years, confidently affirms it to be second only to quinine in the treatment of intermittents. Before using the tincture, should the tongue be coated, an emetic may be given with advantage, and afterwards the tincture in doses of from ʒ iij. to ʒ iv. in a little water, and the patient immediately repair to bed, and be well covered so as to encourage perspiration. The dose may be repeated in three hours. The alkaloid is obtained in the form of a hydrochlorate, and is of a bright yellow color, and of a silky lustre.

On the Treatment of Intra-Uterine Fibrous Tumors.—The *London Medical Review*, for July, contains an article on this subject, by Thos. Hawkins Tanner, M.D. Though nothing can be more simple than the diagnosis and treatment of uterine polypus when expelled into the vagina, it is far different when the tumor is retained in utero, and is of moderate size; the appearance of the os and cervix being normal, no appreciable increase of the size or weight of the organ, no displacement, nor bearing-down pains, and in fact the absence of every unpleasant symptom except hæmorrhage, may for a time render the diagnosis extremely difficult. This last symptom, the writer says, is by no means in proportion to the size of the growth, the more dangerous attacks often accompanying the smaller sized tumors, rendering the patient pallid, feeble, and restless; producing irritations of the stomach, and sometimes œdema of the lower extremities. When these attacks can be only partially or temporarily relieved by rest, nourishing food and proper astringents, we may be sure there is some organic disease of the ovaries or uterus. The former may be diagnosticated by the glands found to be enlarged or tender upon a vaginal examination; but should both ovaries be found to be healthy, and the os and cervix normal, we have then to deal with either malignant disease of the fundus, an unhealthy pulpy condition of the mucous membrane, some dead or diseased product of gestation, or a fibrous tumor. The first is extremely rare. With regard to the remaining causes, he adopts only one plan of treatment as affording any reasonable hope of success; and that is to dilate the os and cervix, so as to permit the removal of the source of the evil. This he does by means of the dilator and sponge tents, until the os is sufficiently dilated to admit of a thorough digital examination, when, if a polypoid tumor be detected, it is removed by ligature or otherwise, as the occasion may require. One difficulty attending the use of the tent is, that if it is not introduced the whole length of the cervix up to the tumor, only part of the neck is dilated, leading us to a false diagnosis. He reports a number of cases, illustrating the treatment.

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AMERICAN MEDICAL JOURNALS.

AMERICAN JOURNAL OF THE MEDICAL SCIENCES. *October.*

I. Treatment of Phthisis by the Chlorate of Potassa. By Austin Flint, M.D., of New York. II. Gun-Shot Wound of Arm, and Amputation at the Shoulder-Joint. By J. D. Irwin, M.D., U. S. A. III. Experimental Researches on Points Connected with the Action of the Heart and Respiration. By Austin Flint, Jr., New York. IV. Formation of Knots on the Umbilical Cord. By William Read, M.D., of Boston. V. Veratrum Viride as a Sedative. By E. Cutter, M.D.; Truman Ricard, M.D., and Wm. Ingalls, M.D., of the Middlesex East District Medical Society, Massachusetts. VI. Detection of Strychnine as a Poison, and the Influence of Morphia in Disguising the Usual Color Test. By John S. Reese, M.D., of Philadelphia. VII. Successful Operation for Inguinal Hernia with the Testicle and Sac above Poupart's Ligament. By F. Taylor Bradford, M.D., Augusta, Kentucky. VIII. Case of Internal Necrosis after Severe Injury of the Thigh, with Extensive Chronic Sub-Periosteal Abscess.—Operation.—Cure. By H. D. Hitchcock, M.D., Kalamazoo, Michigan. IX. Transactions of the College of Physicians, Philadelphia. X. Proceedings of the Pathological Society, Philadelphia.

1. Professor Flint, Sr., was led to test the remedial properties of chlorate of potassa in phthisis by the late Dr. Fountain, of Iowa. Fourteen cases are recorded, eleven taking ℥ ss, and two ʒ iij. daily, with the following results; nine were not benefited, four doubtful, one improved. He adds, "these cases fail to furnish proof of any special efficacy in this remedy to arrest or retard the progress of the disease." He concludes that the remedy may be given to the extent of ℥ ss. daily, with entire impunity.

2. Dr. Irwin's case proved fatal on the twenty-third day of an intercurrent fever, although the wound had nearly healed.

3. Dr. Flint, Jr., by a series of experiments establishes the following facts:—*First*, By means of an instrument, which he calls the metroscope, he determines positively that the heart elongates during the systole of the ventricles. *Second*, That the cause of the rhythmical contraction of the muscular fibres themselves, is one of their inherent properties, and remains so long as they retain their "irritability." That it is derived neither from the cerebro-spinal nor sympathetic system of nerves. *Third*, That the natural stimulus which excites the regular and effectual movements of the heart is the blood, and that this cannot be replaced by a fluid of less density. *Fourth*, That, though the flow of blood in the cavities of the heart is sufficient to induce, under ordinary circumstances, regular contractions of the organ, still it is necessary that these movements be further regulated and controlled; and that this is effected through the agency of the pneumo-gastric nerves. *Fifth*, That the action of the heart may be arrested, through the motor filament of the pneumo-gastric nerves, by means of galvanism; that this does not take place in animals poisoned by woorara, on account of the paralysis of the motor nerves. That the motor filaments of the pneumo-gastric are the last which are affected by this agent, and that in the alligator they are left almost intact. That the cause of the arrest of the action of the heart, by galvanization of the pneumo-gastrics, is the exaggeration of the force which regulates the action of the heart rendering it slower and more powerful. *Sixth*, That in asphyxia the cause of the arrest of the action of the heart is over-distension of its cavities; and that anything which brings about a sufficient amount of distension will equally arrest the action of this organ. *Seventh*, That the auriculo-ventricular valves are closed by a backward pressure operating during the contraction of the ventricles, and not by the current of blood from the auricles to the ventricles. *Eighth*, That the excitation which gives rise to the reflex phenomena of respiration, is received from the general system, and not from the lungs or heart. That this excitation is due to the want of oxygen in the tissues, and not to stimulating properties in the venous blood. That the exaggeration of this excitation constitutes the sense of suffocation, and gives rise, if excessive, to general convulsions.

4. Dr. Read gives the opinions of authors at length on the formation of knots on the umbilical cord, and concludes that they occur at birth by the fœtus passing through a loop lying around the internal os.

5. The Committee has given the experience of a large number of practitioners who unite in their commendation of veratrum viride as an arterial sedative.

6. Dr. Reese concludes from a series of experiments that morphia interferes with the color-test (destroying it if in excess) of strychnia, but does not affect its action on the frog (the frog-test).

7. Dr. Bradford's case presents no points of special interest.

8. Dr. Hitchcock's case gives the usual result of subperiosteal inflammation, viz., a sequestrum which, being removed, terminates in recovery.

Cooper's Dictionary of Practical Surgery and Encyclopedia of Surgical Science.—A New Edition of this work is announced brought down to the present time, by Samuel A. Lane, Surgeon to St. Mary's, and Consulting Surgeon to the Lock Hospitals, assisted by various eminent Surgeons. It will be published in two volumes.

COMMENCEMENT OF THE MEDICAL COLLEGES OF NEW YORK.

SESSION OF 1861-62.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

The inauguration of the Bellevue Hospital Medical College took place on the 18th inst., under circumstances peculiarly gratifying and encouraging to the Trustees and Faculty to whom its early management has been entrusted. From the first inception of the design for the establishment of this college to its complete fulfilment, the founders of the institution, just inaugurated, have been unrelaxing in their efforts to accomplish their praiseworthy object. For several years, Bellevue Hospital has been the resort of large classes of medical students for the purpose of attending its courses of clinical instruction. It very naturally occurred to the Medical Board, that as bedside instruction is the essential part of a medical education, with the addition of a didactic course to that already given, with the legal power to grant diplomas, this Hospital would afford facilities for acquiring a complete and thorough medical education, unsurpassed in this country. The subject was submitted to the attention of the Commissioners of Public Charities and Corrections immediately after their accession to office in April, 1860, and their first step was to solicit the consideration of the Hospital Medical Board. The report made to the Commissioners, in response to their communication, decided the action of that body, and an act of incorporation was obtained conferring on the Bellevue Hospital Medical College all the powers and privileges enjoyed by other chartered medical schools in this State. The college was accordingly organized in April, 1861, the department of instruction instituted, a corps of thirteen professors appointed, and measures taken for the erection of a suitable college building within the hospital grounds. The work of erecting the college building was not commenced till June last, but under the constant supervision of the faculty the work was pushed rapidly forward and completed in a very brief space of time. It was within this new building that the exercises attendant on the formal inauguration of the college were performed. The lecture room is well designed, the form being that of a semicircle, with cushioned seats, ample room for four hundred students, and good light. The dissecting-room is one of the most convenient we have ever seen, having the light brought near the table, an abundant supply of water, etc. The pathological museum, already large, has received most valuable additions from the private collections of Profs. J. R. Wood and Mott. The departments of chemistry and materia medica have large and well appointed collections for illustration.

The members of the Board of Trustees were anxious to mark the occasion of the inauguration of the College by something more than the usual exercises and formalities, and they issued a large number of invitations for an excursion to Randall's Island, and to the new hospital and other charities on Blackwell's Island. In accordance, therefore, with the invitations a large number of ladies and gentlemen assembled at 12 o'clock on the grounds of the Bellevue Hospital, foot of Twenty-sixth street, East river. The extensive wards of the Hospital were the first objects of attention, several gentlemen of the faculty attending the visitors and pointing out and explaining to them subjects of particular interest. A little after 12 o'clock the steamer General Arthur, crowded to her utmost carrying capacity, cleared from the wharf and proceeded to Blackwell's Island, where the excursionists disembarked, the steamer returning for numbers that had been left behind. Here the visitors repaired first to the Island Hospital, which underwent but a very cursory inspection, the time allotted for that purpose being very limited. General approbation was, however, expressed at the cleanliness, quiet, and order which prevailed throughout the establishment. The Almshouse, Penitentiary, and other buildings were hurriedly gone through, all hastening to take their places on the boat which was to convey them to Randall's Island. The boys of the island, to the number of some five hundred, with flags and a band of music, were drawn up in military order, to receive and welcome the visitors, which they did with three hearty cheers and a tiger, given with a vigor and a strength of lungs which spoke well for the physical condition of these young objects of public charity. The military parade of these urchins was the most interesting feature of the excursion. They went through their drill and evolutions with a precision and a confidence which elicited loud and frequent applause from the crowd of strangers by whom they were surrounded. Two of their number—lads named respectively James Daley, aged eleven years, and Maximilian Dightmaker, of about the same age—in succession, stepped in front of the ranks and spoke the welcome of the "Randall Light Infantry," in short, patriotic speeches, which were loudly cheered. The clean and comfortable homes of the female children were the special objects of interest and attraction to the lady visitors, of whom there was a large number. The Insane Asylum, for youths of both sexes, was also visited. But little time was allowed for a ramble among the beautifully kept walks of the island. The Randall Light Infantry moved to the front, and with banners flying and drums beating led the way to the wharf. The whole party was quickly on board, and with cheers from the infantry the steamer took its departure for the city.

THE EXERCISES IN THE COLLEGE.

Every seat in the lecture room was filled, and a little after four o'clock the gentlemen to whom was assigned the more important part of the inauguration, took their places on the platform. Professor Taylor, the President of the College, occupied the chair.

INTRODUCTORY ADDRESS BY PROF. B. W. MACREADY.

According to time-honored custom, each session of every medical college in Great Britain and America, must be opened by a formal address by one of its professors, and what is a matter of course on ordinary occasions, becomes doubly imperative, when, as in our case, a new institution is added to those already sufficiently numerous for the work they have to do, or for the support that is extended to them. It is usual on such an occasion as this last, to say something in praise of the new fledgeling; to point out the stoutness of his thighs and the vigor of his pinions, to extol the shrillness of his voice, and to augur the strength of his flight. To such a task I am wholly unequal, and the arrangements made by the committee have been such as to save you even from the lecture I was prepared to inflict upon you, and I am here only to say a few plain words of the causes which led to, and called for, the formation of our institution.

Something more than twenty-five years ago, I was a student of medicine in this our goodly city of New York, and attended lectures in the time-honored College of Physicians and Surgeons, then situated in Barclay street. Our teaching was wholly didactic and not too abundantly illustrated. The professor of obstetrics, indeed, had some pelves, normal and deformed, and a wet preparation or two, and annually the machine and the manikin were brought out to show us the use of the forceps. The lectures on anatomy, on surgery, and on chemistry, were appropriately illustrated. My former preceptor, the late able and lamented Dr. John B. Beck, a man whose loss is still felt by the profession, did all that was necessary to teach well and thoroughly his own branch, the materia medica; but our physiology was entirely didactic and mostly metaphysical, and as to morbid anatomy, I do not recollect to have seen a recent specimen, scarcely an engraving of one, during my whole term of attendance upon lectures! Clinical teaching—I am speaking of medicine,—there was none, at least none worthy of the name. On the performance of a capital operation, the theatre of the N. Y. Hospital would be well filled with students and doctors; and occasionally during the winter, some half dozen students would be galvanized to attend the physician on duty in his visits to the wards; but the attendance evidently soon became equally tedious to the professor and the students, and in a week or two was sure to terminate. Do not let me be understood as speaking with any want of regard of my old teachers. They were men every way estimable and respectable: eminent in their day, some of them still living to adorn our common profession. I speak of the system and not of individuals.

The necessity for more practical teaching gradually made itself felt by the schools, and the clinics, as they were termed (*lucus a non lucendo*), were introduced at the different colleges. At first, I believe they were purely surgical, but soon the system was extended and clinics were instituted for general diseases, for diseases of women and children, for those of the heart and lungs, for diseases of the skin, in fact for every complaint which did not confine the patient to his bed. These clinics are not without their value. They make the student familiar with the manner of examining a patient, they show him a certain amount of disease, and they are the occasion for various and instructive remarks by the gentlemen who conduct them; but they are obnoxious to serious objections. Many of the patients that attend them are abundantly able to pay for professional services, and they are taken from a class whose treatment falls naturally to the young and struggling physician. All acute and serious disease, that confines the patient to the house, is necessarily excluded from them, while it is impossible for the students to follow up the various cases, to observe the progress of the complaint, and note the effect of remedies. As an addition to proper clinical teaching at our hospitals and dispensaries, they are entirely unnecessary; as a substitute for it they are wholly insufficient.

For a number of years previous to 1848, the medical government of Bellevue Hospital was entrusted to a resident physician appointed by the Common Council. As is common, I believe, with every other office in the gift of our city government, that of resident physician soon became the reward of political partisanship. Every change in the dominant party led to a change of the resident physician, and the change was rarely for the better. Under the officer thus appointed, the duties of the hospital were performed by six or eight young graduates, whose most essential qualification was the payment of a handsome fee to the resident physician. It is not necessary to depict the evils of such a system: the horrors that sometimes occurred, would shock and astonish the least sensitive.

In 1848, the hospital came under the form of medical government, under which, with some slight modifications, it has since continued. From that time to the present, the medical board has steadily and persistently attempted to render the immense advantages offered by the institution available for the instruction of students in clinical medicine. "They believed that they would thus elevate the character of the institution; make it an honor to be connected with it; secure the best attainable services for its inmates, and partly repay the public for the cost of its maintenance by attracting students to the city, and by improving the education of the rising generation of medical men." Regular clinical instruction *has* been given throughout the year to large and increasing classes. Students *have* been attracted to the city, medical men not unfrequently have resorted here for practical improvement, and the name of Bellevue Hospital, instead of being a reproach and a disgrace to New York, is connected throughout the length and breadth of our land with the cause of medical education. The effect of the new system upon the main object of every hospital, the relief of the sick poor, has been equally satisfactory. For twenty years previous to the change in its medical government, the average annual mortality of the hospital was twenty per cent. of the whole number of the patients submitted to treatment. The first year after the change had taken place, the mortality sank to fourteen per cent., and for a number of years back it has been but ten: of the ten thousand patients who last year were submitted to medical and surgical treatment at Bellevue alone, if numbers speak true, the lives of one thousand were saved by the change in the government of the hospital.

When the success of the new system was no longer a matter of speculation; as from year to year the classes attending lectures at the hospital became more numerous and more constant in their attendance; the question naturally came up—Why not add didactic to clinical teaching? Why continue the divorce of two things naturally and intimately allied? In London, the buildings of the medical schools are mostly within the grounds of the hospital; men study medicine at Guy's or St. Thomas's, why not at Bellevue? Throughout the continent of Europe, clinical teachers form part of the regular faculty of the universities. Attendance on clinical is as necessary as on didactic instruction for the obtainment of university honors. Attendance on hospital teaching is not left to the option of the young men, often overworked and always inclined to esteem as of inferior importance what their professors omit from their course as unessential: it is a part of the necessary curriculum demanded of all alike who wish to obtain the doctorate. Are we too far behind Europe to inaugurate such a system? Questions like these occurred, but there was no satisfactory answer. The times were not propitious. In the meanwhile, our enterprising neighbors on the other side of the East river, the City of Churches, stole a march upon New York, and engrafting a medical school on one of her hospitals, in the Long Island Hospital Medical College set an example to the rest of the Union.

When last year the present Board of Commissioners of Charities and Corrections assumed the government of our public institutions and prisons, one of their first steps was to give the medical supervision of the institutions on Blackwell's Island, with the exception of the Lunatic Asylum, and including the new and magnificent Island Hospital, to the Medical Board of Bellevue. The board now found itself at the head of the noblest and most extensive hospital establishment in America—one second to but very few in any country, containing in its wards cases of every disease mankind is heir to, counting among its inmates natives of every quarter of the globe; for I have seen in its wards Lascars and Chinamen, Indian mixed breeds, Spaniards from South America, lying side by side with the natives of every nation in Europe, and of every state in the Union.

Then the question of establishing a school in connexion with the hospital again came up. Occurring at the same time to a number, both connected with the hospital and outside of it, with whom it first took form and shape I know not; but I do know that when the question did come up, it was met by the Commissioners in the kindest, frankest, and most generous manner. Every facility and assistance, consistent with what they deemed their duty to the public, was at once tendered us; in fine, it is owing to liberal and enlightened, and we believe far-seeing views of these gentlemen, that our college owes the possibility of its existence.

Bound together as are the Hospital and College, there is a strange similarity in the time in which they were undertaken. The foundation of the building now occupied as Bellevue Hospital was laid in 1811, while the country was on the eve of the late war with Great Britain. Slowly but steadily its walls went up while an enemy's fleet was blockading our harbor, and an enemy's army devastating our country.

Just fifty years after the foundation of the Hospital, our college, which we hope is to become its complement and crown, was undertaken while we were on the eve of a war far more dreadful than any that could be waged with a foreign enemy. But gloomy as was the outlook, widespread as was the ruin, New York came unscathed out of the last war, and she will live through this; and her works of charity and science go on scarcely checked by the dread commotion around them. Our building is not so ornamental or spacious perhaps as we could wish, or as it would have been under different circumstances, but it contains all that is necessary. We say emphatically to the student, we want here but a lecture-room and museums, your great field of study lies yonder. There is open to you the book of nature, for disease, a consequence of the infraction of his laws, is no less a part of God's providence than health. We are here to teach you the language in which it is written, to aid you by our experience, to help you with our comments; there lies the book itself! Give that your closest study—but remember! Handle its pages tenderly, reverently, they bear the impress of the Creator.

PROF. TAYLOR'S ADDRESS.

Prof. Taylor, President of the Faculty, followed in an exceedingly appropriate and earnest appeal to the students present, bidding them a hearty welcome, extending high encouragement, yet impressing upon their minds the fact that a physician's life is one of toil, self-denial, and struggle. The importance of a good beginning and zeal and devotion to the profession was urged. He said: "Begin well, and the future cross is easy to bear. He who is trifling with the Past at the expense of the Present is forfeiting the Future. What is all time but an everlasting and continual now? Now, are Action, Hope, and Experience concentrated into one. Start well, then, and remember that the next thing, if you would wish to win, is to keep the race!"

REMARKS OF HON. SIMEON DRAPER, PRESIDENT OF THE BOARD OF PUBLIC CHARITIES AND CORRECTIONS.

He said that it was not to be supposed that he would claim the attention of the audience for any length of time. He seldom found himself among doctors, but it was nevertheless his pride to say that he felt himself honored by his association with them on that occasion. He had been for a long time connected with the institutions they had that day examined on the islands, and he had frequently felt it his duty to disclose to the citizens of New York what the Commissioners of these charities had been doing and in what manner they were discharging the high trust committed to their charge. He knew and appreciated what those gentlemen, who were to-day inaugurating a most valuable institution, were daily doing for society at large, and what they had done gratuitously for the poor and destitute of their city. The Commissioners, appreciating the benevolence of the faculty, had deemed it their duty to open the institutions which they governed to their inspection, and to submit the medical department of them to their control, taking care that every man, woman, and child, from one end of the State to the other, should reap the benefits that were here at their very thresholds. He had pride in saying that the institution now inaugurated—to be in future, he hoped, an honor to their city—deserved well of the community so long as it retained within its government the men who were now connected with it—men who were devoting time and energy, and character and professional knowledge, and experience to the relief of those who most needed such friendly interposition and aid—the poor and needy. The institution was peculiarly for the benefit of the young medical students of the city and State, and students from distant States who might seek instruction with them; and he hoped that the students would always conduct themselves in the most unimpeachable manner, and that under no circumstances would they do anything calculated to reflect discredit on the institution. Let it ever be their study to show the world that they were never unmindful of the true interests of every individual, be he ever so unprotected, ever so poor and friendless, but that their hearts were as benevolent and humane as their profession was useful and ennobling.

REMARKS OF ARCHBISHOP HUGHES.

It was not the first time that he had heard the sound of his own voice, and he was not afraid of that sound. But he confessed that he felt more than usual, on an occasion like the present, when he spoke in the presence of scientific gentlemen, of distinguished patrons of everything that was charitable. And he would say that if his remarks should be of the least interest to them, it will be because he had not the slightest knowledge of the science connected with medicine. He was very fortunate, while a student at college, in avoiding the perusal or study of books on medical science. He never knew one of his fellow students who devoted much time to the study of medical books who did not fancy that he was subject to all diseases on the calendar. But, notwithstanding, he had acquired some little knowledge of the history of the profession. He would not go back to the times of the old fathers, of Hippocrates and others, but he would remark, on the testimony of the earliest times, that Cæsar, of Rome, patronized the physicians and gave them the right of citizenship in Rome. Afterwards the Arabs took up the question of medical science, and made great progress in it in their own way. From them it was transferred, in a feeble condition indeed, to Europe. At a very early period the clergy also began to play at doctors. Then it was not considered inconsistent with their sacred profession to do so. In the middle ages, when Christians were filled with prejudice against those who professed the Jewish religion, numbers of that persuasion devoted themselves with quiet industry and success to the study and practice of medicine. And while in some cities they were confined to certain quarters called the Jews' quarters, they, on the other hand, found admittance into the palaces of kings as doctors of medicine. Again, as civilization began to be re-established and improved in modern times, the study and practice of medicine became more and more necessary and general. He had never lost an occasion, while in Europe, of visiting the public institutions, particularly those devoted to medical pursuits, and he had always found that these institutions afforded every opportunity and advantage to young men in the prosecution of their studies. He had visited the medical institutions of Paris, of Lyons, Naples, Vienna, and Rome; and in all these every facility was given to students to perfect themselves in the knowledge of their profession. The question was, if we were to have doctors, why not have the best doctors? He thought that the establishment which they had just opened, under such very flattering auspices, in every sense would become a means of improving and elevating more and more the science of medicine. He could easily imagine, in the condition of society during the past centuries, that medical science could not—for it had not the opportunity—realize its aspirations. But it seemed to him that under the enlightened teaching and instruction which was to be imparted in the new college, the young physicians of the present day will grow up and emulate the fame and reputation of their predecessors who are most distinguished and eminent. There were two classes of men in the world—the killers and the curers. The Duke of Wellington was a great killer, yet while he killed with the sword in one hand he had himself always surrounded with a most eminent staff of curers—the best surgeons that England could afford—to restore, in some sense, the mischief he was employed in inflicting. They had been looking and reading of wars in Europe, but now war had visited them at their own homes, and it was for the physician to alleviate by his skill as much as possible the injuries inflicted upon our soldiers. If this was a post-prandial speech he might be tempted to give as a toast the great killer and eminent curer of their own country and times. In that case he would give—"General Scott and Dr. Mott."

REMARKS BY REV. E. H. CHAPIN.

He remarked that the three branches of human occupation which more especially bore the name of professions, grew out of evil—they sprung from the quarrels, the diseases, and the sins of men, but this evil was the mysterious background that projects from its dark surface the noblest and brightest traits of humanity. Justice and law are made palpable in the sight of men, and grow into power almost omnipotent by the exercise of legal ability, while the doctor and the clergyman are in their walk the helpers and deliverers of their fellows from all physical and moral evil. The good clergyman has infinitely much to do with the bodies of his flock, and so the physician much to do with the soul of his patient. Our Divine Master was the great teacher and the great physician of all the ages. Here is a combination of benevolence, courage, and Christianity, in the one profession which binds up the wounds, while it solaces the heart of the sufferer. Dr. Chapin passed a most brilliant and glowing eulogy upon the medical profession, in a flow of language and with a wealth of illustration peculiar to himself. He narrated the anecdote of Dr. Glynn, who was called on in stormy weather and at night by a poor widow to visit her son where he lay dying of ague, in a wretched cottage among the fens of Cambridge. The doctor took with him bark and wine, and prescribed for the poor lad. A few days afterwards the widow called upon him again, not to announce her son's decase, but to present him with a pet magpie, the only thing her son possessed to send him, in token of his gratitude. That poor homely bird uttered in the doctor's ear, undoubtedly, sweeter notes than songster ever sung, and was, every day, a pleasure to him prouder than laurel crowns and garlands laid at his feet by princess or by king. In conclusion, the eloquent orator defended New York city from the charge of guilt and sordidness. Among all the glorious monuments of her peaceful eminence in every noble thing, behold here this institution which beams a double star on the river bank, shedding wide the highest light of science—the grandest help to man. New York, sitting at the portals of the sea, looking out through her lattice of masts, has felt her great heart to leap too in this hour of the nation's travail with a patriotism that has blossomed out from the stones of her streets into ten thousand flags, and rising in her wealth and her majesty, she has covered the breast of the Union with a shield of gold, and girt it round about with a living bulwark of mighty sinews and bristling steel! Glorious in wisdom, bountiful in charity, in neither peace nor war is she sordid.

REMARKS OF JAMES T. BRADY, ESQ.

MR. BRADY alluded briefly in eloquent terms to the want of gratitude to the medical profession for their invaluable services, and paid a special tribute to the humane and untiring exertions of those who had charge of the Bellevue Hospital for bringing it to its present state of usefulness. The wants of the poor were ministered to as well as the best interests of the rising generation of doctors. In conclusion, he expressed it as his conviction that an institution founded upon such principles must of necessity be perpetual.

The exercises were then closed with prayer by the REV. CHANCELLOR FERRIS.

American Medical Times.

SATURDAY, OCTOBER 26, 1861.

HOSPITAL CONSTRUCTION.

HOSPITALS are great public necessities which have always commanded the regard and support of the Christian world. No appeal to the benevolent is more likely to be cheerfully responded to than that which seeks to sustain these institutions. Governments have also generally recognised their value; some have endowed them liberally, and others have taken them under their fostering care, and lavished upon them untold sums of money. They are, in some measure, the criteria of a nation's progress in civilization, and the measure of its cultivation of those benevolences which spring from the heart of a people imbued with philanthropic sentiments.

And yet how often is this benevolent intention frustrated in its endeavors to benefit the unfortunate, by the faulty construction of the costly structures reared for their benefit, and consecrated to the holy purpose of relieving human suffering, and providing a home for the homeless and destitute sick! Nay, how often do these very buildings become the sources of disease, and the causes of death to those who enter them as asylums for the relief of their individual maladies! Every physician, who has long been attached to one of these public charities, must have felt that our hospitals are too often the great foci of endemic diseases. Typhus, erysipelas, scurvy, hospital gangrene, and all those affections which are generated and always intensified by the congregation of individuals, here prevail from year to year, with no other alternation than that which is produced by the change of seasons. Surgical injuries and operations here reach their maximum of mortality, always greatly in excess of that in private practice. Lying-in women are decimated with a pestilence, so palpably the result of local causes, that it seems barbarous to continue these departments in public hospitals. Foundling institutions are little better than receptacles where these unfortunates are prepared for early death, or imbecile youth, or premature old age. In military practice the evils of the faulty construction of hospitals stand out so vividly that they have long since attracted public attention. The remark of SIR JOHN PRINGLE that "hospitals are among the chief causes of mortality in armies," was confirmed in the Crimean war, where in the early part of the campaign nearly one-half of those treated in hospitals died. Says RUSH, an active and intelligent participant in the management of the hospitals in the war of the Revolution:—"Hospitals are the sinks of human life in an army. They robbed the United States of more citizens than the sword." With rare foresight he thus intimates the reform that would remedy this evil:—"Humanity, economy, and philosophy, all concur in giving a preference to the conveniences and wholesome air of private houses; and should war continue to be the absurd and unchristian mode of deciding national disputes, it is to be hoped that the progress of science will so far mitigate one of its greatest calamities as to produce an abolition of hospitals for acute diseases."

That hospital architecture has made great advances among us is undeniable; but it has, as yet, failed to remedy the evil. Deficient ventilation has been justly regarded as the chief cause of the evils of our hospital system, and multifarious are the measures for accomplishing the desired improvement. The natural courses of cold and hot air have been carefully studied; curious ventilating apparatus has been constructed to conduct the air along the channels which it seeks, or forcibly compel it through devious paths from which it recoils; ceilings have been elevated and wards enlarged to give a larger atmospheric area; but still we have not reached that degree of perfection which is attainable. The fundamental error in our present system of hospital construction, civil as well as military, appears, from recent investigations, to be in the aggregation of large numbers of patients in a single building. Whatever may be the mode of ventilation, however cleanly it may be kept, there will be a constant and overpowering generation and accumulation of the causes of those diseases dependent upon large collections of the sick. Our best conducted hospitals annually demonstrate this fact. Conceal the defects of our large hospitals as we may, it will nevertheless yet appear, that, as at present constructed, they but poorly answer the beneficent purpose for which they were designed.

We are glad to notice at this time, when the General Government must soon provide permanent hospitals on a large scale, that the system of "pavilion hospitals" is beginning to attract attention in this country. The authorities of Boston, always foremost in municipal improvements, and distinguished for the wise direction of their public charities, have determined to erect a "Free City Hospital." The Committee of the Common Council, to whom the subject was referred, have adopted, subject to the action of the authorities, the plan of "pavilion hospitals," now so generally preferred abroad, and so highly commended by MISS NIGHTINGALE. The principle of this plan is that of segregation, rather than aggregation of patients. The plans of the projected hospital were prepared by MR. G. F. J. BRYANT, an architect who seems to have thoroughly comprehended the faults of the old system, and the advantages of the new. He thus describes his plans:—

"The design embraces six separate pavilions radiating from a central structure, but entirely disconnected with said structure excepting by corridors or walks, each of the quadrant of a circle in form. The pavilions are intended to be so grouped with reference to the central building as to be located in parallel rows of two pavilions each, on three sides of the central building, at the distance of eighty feet therefrom. Four of the six pavilions will accommodate from forty to fifty patients each, and are to measure one hundred and seventeen feet in length and twenty-eight in width. The remaining two pavilions are intended for twenty beds each, and are to measure eighty-nine feet in length and twenty-eight feet in width. All six of the pavilions are of three finished stories in height, to wit: basement and two dormitory stories. The central building is proposed to be sixty feet square, and is also three stories in height, arranged exclusively for the officers' apartments and other conveniences requisite for the care-taking and the supervision of the proposed institution. The pavilions are to be so located as to be one hundred feet apart in the clear, and at an average distance of one hundred feet from the central building, thus securing the most ample space for light and ventilation to and between the several buildings composing the complete design."

The plot of ground on which the buildings are to be erected contains about six acres and a half; the cost is estimated at $40,000 for the central building, and $20,000 for each of the others. The advantages to be derived from this plan are thus stated by the architect:—

"1. Sunlight and air. An east and west exposure is secured, the pavilions and wards lying north and south, or nearly so. Ample spaces for the different classes of patients, and also for the comfort of each separate patient. 2. An entire separation of the different classes and sexes, contagious or troublesome, from each other. 3. An easy and economical supervision—one head-nurse and two assistants being able to supervise from forty to fifty patients. 4. A simple, direct, and easy communication to and from all parts of the hospital. 5. A practically fire-proof structure of the wards. 6. Easy warming and perfect ventilating, and cleanliness and quiet. 7. The great simplicity of structure of the pavilions, and their mode of grouping, reducing the cost of their construction to the minimum, and especially making extensions and additions to the capacity of the hospital easy and practicable, without marring the general plan or increasing the cost or size of the central building. 8. The pleasant and harmonious appearance of the grounds and of the structures, upon completion, from all the surrounding streets. 9. The great advantage derived by the city upon the exigency of an epidemic, or of any other occasion when it might be desirable suddenly to avail themselves of a hospital without the necessity of making any change of structure, or of endangering or alarming those already in the institution. 10. Its inexpensiveness, safety, and convenience, compared with any single structure, for the same number of patients. Each pavilion may be an independent hospital, and have all its cookery, washing, &c., done by itself, if necessary, in an emergency, or if contagion is feared, and without the slightest alteration in the plan presented. 11. Practical ventilation can be most effectually secured in a structure designed after the model proposed, without depending upon open windows and doors; and the same may be said of heating by flues and ducts in the floors, supplied with pure outside atmosphere carried into hollow chambers between floors and ceilings of each story. The good and proper ventilation of buildings depends—Upon their being placed in a salubrious and airy situation, that is, where there is a constant and unfailing supply of pure air. Upon their free exposure to the morning and evening sunlight. Upon a thorough separation of the wards from the central building, and from each other. Upon the arrangement of channels for the admission of air, at a suitable temperature at all seasons. Upon provision, by discharging viaducts leading from every occupied room by enclosed pipes, to a central shaft or shafts, or chimneys, which shall be kept in constant and vigorous action by mechanical power, as a fan-wheel, or by heat or steam. By such an arrangement of the windows that they also may be occasionally used for the great additional advantage of giving to the apartments a more direct, natural, and thorough airing than can be had by any artificial apparatus, however well contrived and however perfect, theoretically. The theory of using windows and spaces for light *only* is untenable, and therefore now very properly abandoned by the best experienced persons. By avoiding always, as fatal to a perfect condition of the atmosphere of hospitals, *all enclosed courts, whether three-sided or quadrangular*, as a proper seclusion of the patients can be better had by other means, as by little judiciously placed shrubbery or hedges upon the exposed sides. 12. Most effectual separation is secured by the distance of the pavilions from each other, and cannot be secured without, because it must be so great as to avoid the sounds, and the atmosphere, or emanations from one part being carried to another by a chance wind, or a change of its direction. 13. A thoroughly convenient connexion of all parts with each other is obtained. This is as necessary as the preceding, and is conveniently and perfectly secured by this plan, as any patient or officer can pass from one part to another without the least trouble or exposure, or the intervention of stairs or dark passages. 14. The separate pavilions afford opportunities for all domestic duties to be performed in each building. It is believed, however, that the cooking, washing, ironing, &c., can all be performed in the basement story of the central building more economically and judiciously, excepting the preparation of teas, gruels, and other simples, which can be prepared much more readily and properly in the anterooms of the wards in each of the two stories of the pavilions. But, if it should be thought better, one of the buildings in the rear may be used for this purpose."

We have deemed this explanation of the construction and advantages of the "pavilion hospitals" of sufficient importance to quote at length for the information of those interested in hospital management. Admirably as these hospitals are adapted to civil purposes, they commend themselves by their simplicity, their cheapness, the ease with which they are managed, strongly to our military authorities. We must ere long have permanent military hospitals on a large scale on the Potomac or its vicinity. We trust they will be so constructed as to remove the stigma hitherto resting upon such institutions.

Since the above was written, we learn that **Gen. McClellan** has ordered the immediate construction of the most improved pavilion hospitals, for the accommodation of 5000 beds, with 1750 cubic feet of air-space for each patient. The sites for the buildings have been selected. We may congratulate the country for having at the head of its Army, a commander so enlightened in all that relates to the welfare of its citizen soldiers.

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THE WEEK.

The Medical Colleges of New York have now all commenced their winter sessions, and we are glad to learn, with classes which prove that the average number of students in this city is not materially diminished. We do not infer from this fact, that the gross number of students which will this season enter the Northern Colleges, will equal that of other years, for the schools of New York have always drawn largely upon the South, and must suffer a great diminution from that source. We are justified in concluding that it is due to the growing importance of New York, as a great medical centre, and the value that the profession is beginning to attach to its immense clinical advantages, and the high order of its schools. In another column we give the proceedings on the occasion of the Inauguration of Bellevue Hospital Medical College, which occurred on the 18th inst. The other Colleges were opened on the 21st, with Introductory Addresses, which we shall give next week.

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A new question in the history of syphilis is broached, viz. *Is inherited syphilis protective against subsequent contagion?* **Mr. Hutchinson**, of the London Hospital, says:—

> "It is now generally admitted that a man who has once had an indurated chancre, and the usual *rôle* of secondary symptoms, is not susceptible of a subsequent contagion. In this respect, as in many others, true syphilis resembles the exanthems. The latter, however, although they protect the individual, do not protect his offspring, unless, possibly, in those cases where a pregnant woman is the patient. Now, syphilis chiefly differs from those diseases usually classed as exanthems in that all its stages are very protracted. Time is thus afforded for the offspring to suffer as well as the parent. It becomes, therefore, a very interesting question as to how far an inherited taint is protective against subsequent contagion."

He gives the histories of three cases of heredito-syphilis, in which the primary symptoms of acquired syphilis were marked, but were not followed by constitutional symptoms. "As far as they go," he adds, "they favor the belief, that hereditary syphilis, if severe, is protective against subsequent contagion, and that its subjects are not liable to contract the indurate form of the chancre."

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The medical schools of London began their sessions of 1861–2 on the 1st of October. The regulation adopted by the General Council of Medical Education and Registration, "That all students pass an examination in general education before they commence their professional studies," went into operation on that day. The result, as might have been anticipated, was a diminution of the number of students at the several schools, showing conclusively the importance of such preliminary examination. The *Lancet*, alluding to the operation of this rule, says:—

> "A new era in medical education has commenced. It may be said that it was the first occasion on which an attempt upon a large scale has been made to bring the profession of medicine into closer alliance with literature—to make it, in fact, a *learned* profession. Hitherto one of the great disadvantages under which we have labored has been the absence of any test of the preliminary education of our alumni. It cannot be denied that this has been, to a great extent, disadvantageous to us as a body. Students have become practitioners who have been lamentably deficient in that general knowledge which is essential to the position of a gentleman and a member of a profession like that of Medicine. Fortunately all this will soon cease to exist. The session of 1861 opens with a bright promise for the future."

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In opening the pages of this Journal to **Dr. Peters** for the purpose of making a statement of his withdrawal from homœopathic associations, and subsequently to criticisms on his paper, and his replies, we designed to extend that courtesy of the press which members of the profession to whose interests it is devoted have a right, within proper limits, to demand. But such correspondence, if continued, soon runs into a discussion of the different systems of medicine, a subject which is distasteful to the profession at large. We have, therefore, to inform those who have written to us on this subject that we now close our columns to all further communications growing out of this correspondence. One word as to the propriety of anonymous correspondence. The rule we pursue is that universally approved by weekly medical journals, viz. if a correspondent furnishes us his name, he is entitled to the privilege of withholding it from his communication, and he may do so honorably.

Correspondence.

BRADFORD CO. MEDICAL SOCIETY, PA.

[To the Editor of the American Medical Times.]

Sir:—This Society met at the Odd Fellows' Hall, in the borough of Towanda, on Wednesday, Sept. 4, 1861, at ten o'clock A.M., the President, **Dr. Parsons**, in the Chair. **Dr. Horton** offered the following:—

Whereas, As it is the request of the volunteers of this county, that a surgeon from this section be appointed by the Government, to attend them; therefore,

Resolved, That we unanimously recommend **Dr. E. P. Allen**, of Smithfield, for such. Appointment carried.

Dr. Allen reported a case of concussion of the brain from a blow on the head, producing a fissure and slight depression of the outer table of the cranium. After a few minutes the patient was sensible, and then became unconscious, comatose, and vomited. He was treated antiphlogistically by venesection, purging, etc. After a few days he began to be sensible, but had double vision. He finally recovered without an operation.

Dr. Claggett reported a case of dysentery, that assumed the form of acute rheumatism, and afterwards by metastasis attacked the *uterus*, producing severe labor pains. She recovered by the use of anodynes and anti-rheumatics.

Dr. Holmes reported a case of *alcoholic poisoning*, in a young man, aged sixteen years. He became comatose within two hours after taking five drinks of whiskey, was left by his companions in his own father's barn, about twelve o'clock at night, to get sober, and was found dead in the morning. An autopsy revealed venous congestion of the brain, and an alcoholic scent in the ventricles, and over a pint of liquid in the stomach with a strong alcoholic smell.

Dr. Holmes also reported three cases of chorea, two of which were connected with deranged menstruation, and the other following acute rheumatism. All recovered under a treatment adapted to indications without specifics.

Dr. Homet reported the case of a little boy, aged six years, that had nearly severed his forefinger with an axe, excepting a small portion of skin on the inside. It was immediately perfectly adjusted, and by cold water applications was restored.

Dr. Mason reported a case of fracture of the skull, in a lady aged about thirty years, with slight depression of the outer table. In jumping from a carriage she fell, was not unconscious, was treated antiphlogistically, and recovered. As the doctor had been censured for not trepanning, the Society debated the subject, and unanimously sustained him for not operating, as well as to recommend the rule not to operate until the symptoms are sufficient to warrant it.

Dr. Rockwell communicated a case, read by Dr. Mason, of an incised wound of the abdomen, with a portion of the omentum protruding, which failing to return, the doctor cut off, with very little hemorrhage, and then dressed the wound—the man was at his labor in ten days.

The lecture, essays, and medical discussion were postponed to the next meeting.

Mr. H. M. Moody, student of medicine, read a very interesting paper on sulphate of quinine, which reflected much credit on the author.

The Committee on nominations then reported the following, viz.:—*President*, Dr. C. M. Turner, Towanda; 1st *Vice President*, Dr. W. L. Claggett; 2d *Vice President*, Dr. E. G. Tracy, Sylvania; *Tr. Secretary*, Dr. Daniel Holmes, Canton; *Cor. Secretary*, Dr. V. Homet, Terrytown; *Treasurer*, E. H. Mason, Towanda; *Censors*, Drs. G. F. Horton, A. Parsons, Benjamin DeWitt.

Dr. Turner, the newly elected President, after being introduced to the Society, gave a brief address, making some very appropriate remarks, and promised his hearty co-operation with the members, in all its interests.

By the request of the Society, Dr. Parsons, the retiring President, delivered the Annual Address.

The Society adjourned to the library, which probably is not surpassed by any private collection in the State, being composed of literary, scientific, and medical works, and spent an hour in the examination of its extensive and variable collection of works, among which are many specimens of the earliest exhibitions of the art of printing. This vast collection, which has been procured at an enormous expense, from Great Britain, Europe, Egypt, and in fact from all parts of the world, is rendered doubly interesting and instructive by its numerous living representations of past ages, customs, and times, that books cannot describe.

The Society again met, and unanimously adopted the following resolutions, viz.:—1. That whereas the war now being waged against our government, has been undertaken without any apology or excuse, and has for its only object the overthrow of our free institutions; therefore, 2, That we will give to the national administration our most hearty co-operation and support in the execution of all necessary means for its entire suppression, and the total annihilation of *treason*.

The President then appointed Dr. Holmes, Lecturer, and Drs. Mason and Rockwell, Essayists, for the next meeting. The subject of blood-letting, in acute diseases, was chosen for discussion.

On motion, the Society adjourned, to meet in the borough of Athens, on the first Wednesday (the first day) of January, 1862, at ten o'clock A.M.

Daniel Holmes, M.D., *Sec'y*.

Canton, Sept. 18, 1861.

DR. PETERS'S REPLY.

[To the Editor of the American Medical Times.]

Sir:—During a not very short service as a medical journalist, I have never published a covert criticism, much less made an anonymous personal assault upon any one. In common with the majority of the world, I have always regarded assaults from unseen hands and pens as essentially cowardly, generally spiteful, and almost more or less untruthful.

C. C. assumes that he has "a jealous regard for the honor, dignity, etc., of a noble profession." He must be aware that jealous people are invariably unjust and unnecessarily suspicious, while a noble profession should have none but frank and manly defenders.

I have already given in my unqualified adhesion to the code of the American Medical Association, under the ban of which I think C. C. has fairly placed himself by his exclusive adoption of the dogma *contraria contrariis*. A rigid carrying out of the antagonistic mode would oblige one always to use comparatively large, and frequently excessively large doses; it also obliges the practitioner to thwart every operation of nature, check every critical endeavor and secretion, etc. etc. This is a much more dangerous fallacy than *similia similibus*, which I also reject as an exclusive dogma. My only attempt "to ride two horses," or more correctly, *drive* two horses, consisted in the simple statement of *fact*, that similarity was not identity, but a compound, a double team if Contraria pleases, of resemblance coupled with difference. This statement of fact is followed by the inevitable corollary that no such thing as an absolutely homœopathic cure can take place, while it also proves that remedies which act similarly yet differently from any given disease, may cure it.

I made this point in the *Homœopathic Examiner* for Dec., 1843, p. 370, quite as positively and distinctly as I ever have since. I there quoted § 45 of the *Organon*, in which we read: "Two diseases which *differ greatly* in their species, but which bear a strong resemblance in their symtoms, always mutually destroy each other. Without this *natural difference* between the affection arising from the disease, and that arising from the medicine, there could not possibly be any cure, but rather an exasperation of the disease." It is true that Hahnemann labors subsequently to prove that no cure can take place unless there be a certain degree of similarity between the action of the disease and that of the medicine which cures it; but this assumption is not only contradicted by his own admissions, but also by some of his practice and that of his followers. On page 371, I say, this assumption is contradicted by all the theory and much of the practice of the dominant school. It cannot be a true theory, for it is opposed to many facts, and explains none. I can discover no other escape for the mere homœopathist and mere allopathist from this dilemma, than in the recognition and acceptation by them of the *fact*, that similarity always includes some difference.

Yours, etc. J. C. Peters.

Army Medical Intelligence.

DUTIES OF BRIGADE SURGEONS.

Headquarters Army of the Potomac,
Washington, Oct. 8, 1861.

General Orders, No. 20.—The following regulations respecting the duties of Brigade Surgeons are published for the government of all concerned:

1. The Brigade Surgeons will frequently inspect the police, cooking, clothing, and cleanliness of the camps and men in respective Brigades; the position and condition of the sinks, the drainage of the camp grounds, the ventilation of the tents, &c.; making written reports to the Brigade commanders whenever, in their opinion, any errors in these respects require correction, and sending duplicates of these reports to the Medical Director of the Army.

2. They will see that the medicines, hospital stores, instruments, and dressings of the several Regimental Surgeons are kept constantly sufficient in quantity, in good order, and always ready for active service.

3. They will collect from the several Regimental Surgeons, and transmit, every Saturday morning, to the Medical Director, a copy of their morning report made to the commanding officer of the Regiment, and will accompany these with remarks showing the character of the principal diseases prevailing.

4. They will promptly report to the Medical Director all changes in station, or location, of themselves, or any of the medical officers in their brigades, with the number, date, and authority of the order by which such changes were made.

5. They will inspect carefully all men receiving certificates of disability for discharge, and, if they approve, they will countersign such certificates.

6. The hospital attendants, to the number of ten men to a regiment, and the regimental bands, will be assembled under the supervision of the Brigade Surgeons, and will be drilled one hour each day, except Sunday, by the regimental medical officers, in setting up and dismantling the hand stretchers, litters, and ambulances; in handling men carefully, placing them upon the litters and the ambulance beds, putting them into the ambulances, taking them out, etc.; carrying men upon the hand stretchers (observing that the leading bearer steps off with the *left* foot, and the rear bearer with the *right*); in short, in everything that can render this service effective, and the most comfortable for the wounded who are to be transported.

7. Brigade Surgeons will see that the orders of the Commanding General, in relation to the uses to which ambulances are to be applied, are strictly obeyed, and they will report promptly to the Brigade Commanders all infractions of these orders.

8. Whenever a skirmish or affair of outposts occurs, in which any portion of their Brigade is engaged, they will see that the ambulances and stretchers, properly manned with the drilled men, are in immediate readiness and attendance to bring off the wounded; and that the Regimental Medical Officers are at their posts, with their instruments, dressings, and hospital knapsacks, in complete order, and ready for immediate use, so that no delay may occur in rendering the necessary surgical aid to the wounded.

9. They will report in writing to the Medical Director, within twenty-four hours after any affair with the enemy, the name, rank, and regiment of each of the wounded, the nature and situation of the wound, and the surgical means adopted in the case.

10. Brigade Surgeons will be held responsible that the hospital service in their brigades is kept constantly effective, and in readiness for any emergency. No remissness in this respect will be tolerated or overlooked.

By command of Maj.-Gen. McClellan.

S. Williams, *Ass't Adjutant-General.*

Official.

Richard B. Irwin, *Aid-de-Camp.*

Note.—The Medical Director desires that exsection of the shoulder and elbow-joints shall be resorted to in preference to amputation, in all cases offering a reasonable hope of success, and that Pirogoff's operation at the ankle should be preferred to Chopart's, or to amputation above the ankle, in cases that might admit of a choice.

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BOARD OF MEDICAL EXAMINERS, PENN.

The *Harrisburg Telegraph* of Oct. 6th contains the following notice of the meeting of the State Medical Board: "A Medical Board for the examination of all surgeons or assistant surgeons, now acting as such in any regiment of volunteers raised in the State of Pennsylvania, convened in the chamber of the House of Representatives, in this city, at 9 o'clock this morning. The Board consisted of Dr. Welmer Worthington, of Westchester, Dr. Trail Green, of Easton, and Dr. W. Corson, of Norristown. President, Surgeon-General Henry H. Smith.

Shortly after the body convened his Excellency Gov. Curtin entered the chamber and was conducted to the Speaker's platform, when he was introduced to the assembly by Gen. Smith, in the following remarks:—

In obedience to your orders I have convened a State Board of Surgeons, whom I have now the pleasure of introducing to you as distinguished members of the medical profession, as citizens deeply interested in the welfare of Pennsylvania, and as the warm advocates of the cause of the Union now threatened by the traitors assembled around Washington. [Gen. Smith here introduced the members of the Board personally to the Governor.] I also introduce to you the large body of candidates who have so energetically responded to the intimation that our brethren in arms for the maintenance of the government were likely to require their professional services. Like the combatants in the Isthmian games, these gentlemen have been engaged in a generous rivalry, and hope to gain at the hands of your Excellency that award that will give increased honor to the laurels hereafter to be won on the battle-field.

Gen. Curtin followed, and in greeting the assembly remarked, that he was glad to see a gathering so large in number and so respectable in ability convened in response to the call of the Surgeon General. The posts for which they were about to be examined were of the highest importance, and in responsibility ranked with any in the service. The army surgeon held in his hands the health of the soldier, and when wounded and bleeding, it becomes his duty to save his life if possible. Certainly such a duty requires the highest skill, and therefore the State has wisely provided for the selection to be made from among the ablest of the medical profession, and for this purpose this examination was instituted. Gov. Curtin thanked the physicians present for their promptness in responding to the call of duty and humanity, and then commended them to the impartiality of the medical commission before whom they were to be examined.

There were one hundred and sixty-five candidates present for examination, who were arranged around the circular desks busily engaged writing out the answers to the printed questions before them, present a scene of lively interest, and an array of talent seldom if ever equalled in any one body of men. The examinations this morning were confined altogether to the proficiency of the candidates in the general practice of *medicine* and *materia medica*, while the afternoon session was devoted exclusively to examinations in *anatomy* and *surgery*.

Medical News.

New York Eye Infirmary, corner of 13th street and 2d Avenue.

Clinical Days:—Monday, Wednesday, and Friday, for the eye; and Tuesday and Saturday for the ear, at twelve M.

Surgeons.—Abram Du Bois, M.D.; Gurdon Buck, M.D.; Thaddeus M. Halstead, M.D.; C. R. Agnew, M.D.

Assistant Surgeons.—F. J. Bumstead, M.D.; J. H. Hinton, M.D.; H. D. Noyes, M.D.

Adulteration of Food.—At the meeting of the City Council of Melbourne, on the 10th inst., when the subject of electing a Health Officer was decided upon, some discussion took place as to whether it was not an analyst, rather than a medical practitioner, that was wanted. Alderman Eades said that the profession of an analyst was distinct from that of medicine. He doubted whether there were more than two or three persons in the colony capable of filling the office of analyst to the Council. He questioned whether they were in a position to pay an officer of this kind, who would require something like £1000, rather than £50 a year.—*Med. Record.*

Grand Surgical Prize—For the Preservation of Limbs by the Preservation of the Periosteum.—This is a prize of 20,000 francs, to be awarded, if there is a suitable occasion, in 1866. The following is an extract from the explanation of the object for which this prize is offered as published by Flourens:

"Numerous facts have proved that the periosteum has the power of producing bone. Recently some remarkable facts in human surgery have shown that very extended portions of bone have been reproduced by the periosteum which remained. The time appears to have arrived to call the attention of surgeons to a great and novel study, which is interesting at once to science and to humanity. Those who engage in it will not forget that their labor is at once practical and that they are laboring for man, and that it draws no less upon their respect for humanity than upon their intelligence."

The Academy had decided that the prize should be 10,000 francs. When informed of this decision the Emperor, fully appreciating the benefits to be derived from such progress in surgery, immediately caused a communication to be sent to the Academy that the prize should be doubled. The prize will therefore be 20,000 francs. The essays, written in French, should be presented to the Secretary of the Institute before the 1st of April, 1866.—*Am. Jour. Sci. and Arts.*

Cattle Disease in Russia.—The terrible Siberian epidemic, as it is called, continues its ravages in the animal world of the western provinces. In the districts Schlüsselburg, New Ladoga, Luga, and Zarskoje, which are all within a short distance of St. Petersburg, as many as 4,400 horses, 890 cows, and 319 sheep have fallen within the last two months. Of the remoter districts we have not received any exact numbers, but the state of things there may be gathered from the circumstance that the extensive exportation of cattle to Germany has entirely ceased.—*Brit. Med. Journal.*

Sir James Murray's Substitute for Tinctures.—At present the class of medicines known as "tinctures" are all made by a maceration of the active ingredient in proof spirit of wine. This method, although it dissolves the active qualities of the drug, is so far objectionable, that the potency of the spirit prevents the exhibition of a sufficient dose of the medicine, which will thus require to be diluted and repeated, or mixed with other components to insure its action. The change proposed by Sir James, after long experience and prolonged investigation, consists in the substitution of a liquid of highly carbonated magnesia and camphor for the menstruum at present in use. He finds that this combination, by simple cold infusion, is quite capable of extracting the medicinal qualities of roots, leaves, seeds, and even of gum resins, while the conservative and antiseptic properties of the camphor prevent decomposition, and sufficiently stimulate the stomach and absorbents to secure the fullest expected effect.—*Dub. Med. Press.*

Two Species of Syphilitic Virus.—M. Alphonse Guérin of the Lourcine admits the existence of two species of venereal ulceration; and he sums up their characters thus. The one sort is inoculable on the patient himself; the other is not. The one is developed at once from the moment of contact; the other appears after long incubation. The one is local, its sphere of action not passing beyond the glands which receive the lymphatics proceeding from its site; the appearance of the other indicates that the whole economy is impregnated with the syphilitic virus. Both are reproduced, each according to its kind, though there are certain appearances which may lead the observer into error upon this point. They are completely dissimilar in their aspect. The non-infecting chancre is accompanied with acute adenitis, and tends to suppuration. The infecting chancre is accompanied with induration of the absorbent glands, showing that the poison has affected the whole lymphatic system.—*British Medical Journal.*

Evils resulting from an Ignorance of Medical Psychology.—"It is most lamentable," writes Dr. Laycock, "to see the overcrowding in preparatory schools for young children, usually held in what are or have been private houses, and in which the air-supply is wholly insufficient for even maintaining health at all. If schoolmasters were thoroughly imbued with the simple but fundamental truth, that more oxygen is necessary for the brain in action than in repose, they would never rest until they had secured for themselves and their charge at least as ample a supply of air in the class-rooms, as is thought necessary for the sleeping-rooms of paupers and prisoners."

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NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 30th day of September to the 7th day of October, 1861.

Abstract of the Official Report.

Deaths.—Men, 80; women, 86; boys, 125; girls, 107—total, 398. Adults, 166; children, 232; males, 205; females, 193; colored, 6. Infants under two years of age, 163. Children reported of native parents, 11; foreign, 188.

Among the causes of death we notice:—Apoplexy, 8; infantile convulsions, 30; croup, 6, diphtheria, 8; scarlet fever, 18; typhus and typhoid fevers, 7; cholera infantum, 22; cholera morbus, 0; consumption, 71; small-pox, 8; dropsy of head, 14; infantile marasmus, 33; diarrhœa and dysentery, 18; inflammation of brain, 11; of bowels, 8; of lungs, 10; bronchitis, 6; congestion of brain, 11; of lungs, 9; erysipelas, 1; whooping cough, 6; measles, 5. 204 deaths occurred from acute diseases, and 28 from violent causes. 257 were native, and 141 foreign; of whom 92 came from Ireland; 8 died in the Immigrant Institution, and 58 in the City Charities; of whom 18 were in the Bellevue Hospital.

From the 7th day of October to the 14th day of October, 1861.

Deaths.—Men, 76; women, 79, boys, 121; girls, 102—total, 378. Adults, 155; children, 223; males, 197; females, 181; colored, 7. Infants under two years of age, 152. Children reported of native parents, 18; foreign, 156.

Among the causes of death we notice:—Apoplexy, 8; infantile convulsions, 36; croup, 8; diphtheria, 6; scarlet fever, 15; typhus and typhoid fevers, 12; cholera infantum, 9; consumption, 45; small-pox, 5; dropsy of head, 16; infantile marasmus, 22; diarrhœa and dysentery, 21; inflammation of brain, 10; of bowels, 11; of lungs, 19; bronchitis, 5; congestion of brain, 7; of lungs, 8; erysipelas, 1; whooping cough, 4; measles, 2. 202 deaths occurred from acute diseases, and 43 from violent causes. 257 were native, and 121 foreign; of whom 86 came from Ireland; 8 died in the Immigrant Institution, and 56 in the City Charities; of whom 11 were in the Bellevue Hospital.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 14th day of October to the 21st day of October, 1861.

Abstract of the Official Report.

Deaths.—Men, 83; women, 75; boys, 120; girls, 108—total, 386. Adults, 158; children, 228; males, 203; females, 183; colored, 8. Infants under two years of age, 169. Children reported of native parents, 30; foreign, 159.

Among the causes of death we notice:—Apoplexy, 4; Infantile convulsions, 29; croup, 5; diphtheria, 8; scarlet fever, 10; typhus and typhoid fevers, 3; cholera infantum, 22; cholera morbus, 0; consumption, 52; small-pox, 8; dropsy of head, 21; infantile marasmus, 39; diarrhœa and dysentery, 17; inflammation of brain, 7; of bowels, 7; of lungs, 17; bronchitis, 1; congestion of brain, 7; of lungs, 4; erysipelas, 0; whooping cough, 1; measles, 4. 183 deaths occurred from acute disease, and 33 from violent causes. 281 were native, and 105 foreign; of whom 66 came from Ireland; 3 died in the Immigrant Institution, and 52 in the City Charities; of whom 21 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Oct.	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Rain.
1861	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In	°	°	°	°	°			
13th	29.64	.28	53	45	60	1	9½	N W to S W.	8	
14th	29.97	.09	54	42	64	9	18		0	
15th	30.11	.21	61	48	73	6	13	W. to S. E.	0	
16th	30.14	.11	61	54	70	6½	10	N. E. to S. E	9	
17th	29.94	.20	63	59	69	3	4	N. E.	9	
18th	29.74	.10	72	65	79	3	6	N. E. to S. E.	6	87
19th	29.73	.11	69	64	76	2	3	N. E. to S. E	10	1.50

Remarks.—13th, Very light showers at 7 A.M., 1½ and 6 P.M., extending over a very small space of country; sky variable during the day; wind, fresh P.M. 14th, Wind, fresh A.M. 15th, Calm. 17th, Sky clearing from 2 to 4 P.M. 18th, Hard rain early, ending at 7 A.M.; light shower at noon; variable sky P.M. 19th, Hard rain from 2¾ to 4¾ P.M., also with thunder and lightning between 6 and 7 P.M.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture IV.

Inspection.—Application to Determine the Frequency of Respirations and Diagnostic Characters pertaining to Labor and Rhythm of the Respiratory Acts.—Normal Deviations from the Symmetry of the two Sides of the Chest.—Respiratory Movements of the Chest in Health.—Signs obtained by Inspection in Pleurisy, in Emphysema, in Pneumonia, in Partial Enlargement from Dilatation of the Heart and Pericarditis, Tumors, enlarged Spleen and Liver.—Sinking in of the Yielding Portions of the Chest in Cases of Obstruction within the Air Passages, and of Emphysema.—Depression of the Summit of the Chest, in Front, and diminished Superior Costal Breathing in Cases of Tuberculosis.—Restrained Movements of the Scapula in Tuberculosis and other Affections.

Gentlemen:—I have considered in the three preceding lectures the signs obtained by percussion. I shall now ask your attention to the consideration of another method of exploration, viz. Inspection. I shall speak of inspection, mensuration, palpation, and succussion, before I enter upon auscultation, reserving the consideration of the latter—the most important of all the methods—until the last.

By inspection is meant, simply, an ocular examination of the chest. It furnishes important signs, relating, *first*, to the frequency, rhythm, etc., of the respirations; and *second*, to the size, form, and movements of the chest. We direct our eyes to the chest, without removal of the clothing, in order to observe and enumerate the respirations. Certain pulmonary affections are characterized by great frequency of the respirations. This is true of capillary bronchitis, of certain cases of pneumonia, when a large portion of the lungs becomes involved, of cases of pleurisy in which considerable effusion has taken place rapidly, and of cases of acute phthisis. The frequency of the respiratory acts is a point of importance in the diagnosis of these affections.

The respirations, with or without increased frequency, may be more or less labored, and this labor may be marked in the inspiratory act alone, in the expiratory act alone, or in both acts. Here are points of importance in diagnosis. Another point relates to rhythm, *i. e.* the relative duration and quickness of the inspiratory and expiratory acts. In affections of the larynx causing obstruction, viz. acute laryngitis, membranous croup, diphtheria extending within the larynx, and morbid growths in this situation, the respirations are labored, and the labor is manifest both in inspiration and expiration. But in œdema of the glottis, the obstruction and labor are confined to the inspiratory act, and this fact is to be taken into account in the diagnosis of that affection. In dyspnœa due to emphysema and asthma, the inspiratory act is shortened and quickened, while the expiratory act is prolonged and labored. We have recently illustrated this rhythmical change in a patient now in one of my wards. It is quite diagnostic of that affection. The patient, suffering in consequence of an over-distension of the air-cells with air, expires with abnormal force, at the same time prolonging the act, in order to expel from the lungs as much air as possible, and thus create space for a fresh supply of air; and the want of fresh air impels him to inspire with rapidity. The inspiratory act is shortened and quickened whenever dyspnœa is felt, and there is no obstruction to the ingress of air. I shall have occasion, also, to point out this change in rhythm as accompanying and preceding the state of coma suddenly developed in the continued fevers. A similar change is observed in some cases of hysteria.

A single practical remark with reference to observing and enumerating the respirations. If patients are aware that the attention of the physician is thus directed, they are sometimes led, unintentionally, to modify the habitual mode of breathing. It is, therefore, desirable to note the points pertaining to rhythm and labor, and to ascertain the frequency of the respirations by counting, when the patient supposes your attention to be elsewhere directed. The most convenient plan is to observe the breathing while holding the wrist of the patient, after having observed the pulse, as if the latter symptom were still under observation.

The second application of inspection, viz. to obtain signs pertaining to the size, form, and movements of the chest, is of great importance. It should generally be employed prior to employing the other methods of exploration, in order to ascertain if the chest be deformed or symmetrical, and to seek for information which will frequently guide us in the employment of the other methods. Here, as in studying the signs obtained by other methods, we must take, as our point of departure, the state of health. What are the important points pertaining to the size, form, and movements of the healthy chest?

In proceeding to answer this question, I shall introduce a patient with a healthy and well formed chest. The chest is completely exposed to view, and here let me remark, that this should be required whenever we are called upon to make a careful physical exploration in the male subject. It is sometimes important to explore the entire chest in the female, but it will suffice, in most cases, to inspect successively the upper and lower thirds of the anterior surface, uncovering completely the back. We make this compromise with the requirements of delicacy in the female, but in the male we should avail ourselves of the advantages of inspection to the fullest extent.

In inspection as in percussion, we compare the two lateral halves of the chest, and the signs of disease consist of abnormal points of disparity between the two sides. Now, are the two sides of a healthy and well formed chest in all respects symmetrical? They are so in certain respects, but not in all. The shoulders, as in the subject before you, should be on a level, *i. e.* the scapula on either side should neither be elevated nor depressed; the interscapular spaces should be equal in width; the nipples should be on a level, and equi-distant from the median line, and the infra-clavicular regions should be alike as regards fulness. In these respects you see the chest before you is symmetrical. But if you compare the two sides of the inferior portion, it is evident to the eye that the right side is somewhat larger than the left. This is generally the case, the circumference of the right side usually exceeding that of the left by about half an inch. A slight prominence is also perceptible in the præcordial region. This is apparent in about twenty-five per cent. of healthy persons with well formed chests. In about the same ratio, also, a certain amount of prominence is apparent behind on the right side. These are normal points of disparity between the two sides; and we examine patients by inspection to acertain, in the first place, whether, in other respects than these, the chest is symmetrical. The normal symmetry may be lost by spinal curvature; and more or less lateral curvature is quite common in healthy persons, especially in females. This not only affects the normal symmetry as regards inspection, but as regards the signs obtained by percussion and auscultation, and proper allowance is to be made for it. So, various deformities of the chest may exist, dependent on accidents and diseases of early life.

Next, let us direct our attention to the visible movements of the chest in respiration. As this patient now breathes quietly, you perceive a rising of the abdomen with inspiration, and a falling with expiration, due to the play of the diaphragm. At the same time, as you observe, there is a lateral expansion of the lower ribs. There is also a slight movement at the upper part of the chest.

The movements in the three situations just named may be regarded separately, and it is convenient to distinguish them from each other by different names. The movements of the abdomen we will call abdominal breathing; the movements of the lower ribs we will call the inferior costal, and the movements of the upper part of the chest we will call the superior costal breathing. Generally, in the male subject, the breathing, when tranquil, is abdominal and inferior costal mainly, or exclusively. The superior costal breathing is but little, or not at all, apparent. In the female it is different, the superior costal breathing being more marked. But in forced breathing in the male, the abdominal movements are less marked than in tranquil breathing, the inferior and superior costal movements becoming prominent, and in the female the superior costal movements are notably so. Regarding the chest from behind, the scapulæ are slightly and equally raised in tranquil, and especially in forced breathing. These points, so far as the male subject is concerned, are illustrated in the patient before you.

We will now direct our attention to the signs of disease, and the readiest way of presenting these is to consider them as they occur in the different thoracic affections. We will consider first the signs obtained by inspection in pleurisy.

In the first stage of pleurisy, *i. e.* prior to much liquid effusion, there is no change in size apparent to the eye, but the movements of the affected side are diminished, and those of the healthy side increased. This disparity is observable in the superior costal, inferior costal, and the abdominal movements. The pain produced by the movements of the affected side leads the patient instinctively to restrain them, and the movements are instinctively increased on the other side by way of compensation. These signs, however, are not distinctive of pleurisy. They are also present in cases of pleurodynia and intercostal neuralgia, in proportion to the painfulness of the movements of the affected side in these affections.

In the second stage of pleurisy, *i. e.* after liquid effusion has taken place, the size of the chest on the affected side becomes enlarged when the quantity of liquid is sufficient to compress the lung and dilate the thoracic walls; and, in proportion to the dilatation, the movements are restrained or even arrested, not now on account of pain, but because the affected side is already expanded more or less, perhaps to the utmost limit of a forced inspiration, or even beyond that limit. The movements of the healthy side are still supplementarily exaggerated.

These appearances are illustrated in the three patients whom I shall now introduce. They are patients whom you have already seen. One is affected with empyema, one with ordinary chronic pleurisy, and the other with pneumo-hydrothorax—all these affections being varieties of pleurisy. As these patients now stand side by side, you see, at once, the enlargement of one half of the chest in each; you see, too, this enlargement extends over the whole of the affected side, but is most marked at the base, and the movements on that side are almost nil, while they are abnormally increased on the healthy side.

Let me call your attention to a point connected with the enlargement of one side of the chest in each of these cases, which is, in itself, almost proof of the presence of liquid effusion. Observe, in each case, at the inferior antero-lateral portion of the chest, on the affected side, the intercostal spaces are not depressed, while they are so on the opposite side. They are pushed out on a level with the ribs, and do not become depressed even when the patients take a forced inspiration, which depresses the spaces deeply on the healthy side. I now recall our healthy subject, and you see, in the situation indicated, the intercostal depressions are apparent on both sides, and are deeply marked on both sides with a forcible inspiration. This pushing out of the intercostal spaces is almost conclusive evidence that the chest is dilated by a liquid. The expansion of the lung in emphysema sometimes has this effect, but not generally, and very rarely to the same extent.

If you direct your observation more closely to the affected sides in these three cases, you will perceive the direction of the ribs to be less oblique than on the healthy side; they approximate to a horizontal direction, and the spaces between the ribs are wider. Looking at the chest from behind, when I request the patients to breathe in a forcible manner, you see the scapula on the affected side remains nearly motionless, while it is considerably raised on the healthy side. The interscapular spaces are somewhat wider on the affected sides, and the shoulders are slightly raised.

When recovery from pleurisy takes place, the liquid disappears, and what is the effect? The lung expands, but not at once, if ever, to the same volume which it had before. It remains more or less contracted, and the consequences are proportionate contraction of the chest from atmospheric pressure. This contraction, subsequent to pleurisy, other things being equal, is great or small, according to the extent and duration of the previous dilatation from the liquid. It decreases and sometimes disappears if the patient be young, but it always remains to a greater or less extent if the patient have attained to adult years. Generally the contraction is characteristic, so that the fact that pleurisy has occurred at some period more or less remote, is determinable by inspection; a retrospective diagnosis is easily made. You will meet with persons frequently who present the indelible traces of chronic pleurisy in the appearance of the chest.

Among the patients in my wards I have found two who present, in a remarkable degree, the contraction of the chest due to recovery from chronic pleurisy. I now introduce them, with their chests denuded. You observe in both the contraction everywhere on one side in front; the shoulders on that side lowered; the interscapular spaces greatly diminished; the respiratory movements restrained; the spaces between the ribs lessened, and the nipple carried downwards. These appearances are by no means so striking in all cases; they are of every gradation between a moderate and a very great degree of contraction.

I may as well here call your attention to the situation of the heart in one of the cases in which the chest on one side is filled with liquid (empyema), and in one of the cases of contracted chest. The situation of the heart may be determinable by palpation and auscultation when inspection is not available for this purpose; but in these cases it happens that the beating of the organ is distinctly seen. In the case of empyema, the beating is visible in the third intercostal space on the right side. The accumulation of pus in the left pleural sac has pushed the heart from the pericardia into its present situation. The presence of the heart in this abnormal situation is evidenced by percussion and by auscultation. This is the direction in which it is carried by liquid effusion in sufficient quantity accumulating in the left pleural sac. In one of the cases of contracted chest, you also see the beating of the heart on the right side of the sternum in the fourth intercostal space. The contraction, in this case, is on the right side; how, then, does it happen that the heart is on that side? It has been drawn into that side by atmospheric pressure or suction. As the liquid was removed by absorption, the lung failed to expand sufficiently to fill the space left vacant; the thoracic walls were depressed to a certain point and then resisted the pressure; then, the heart, being movable, was drawn into the right side to fill the vacuum. You see, by the evidence afforded by percussion, that the liver is elevated, pushing the diaphragm upwards higher than usual.

I may mention here another way in which the heart becomes permanently dislocated, which is illustrated by a case now at the Island Hospital. In this case, the patient is recovering from chronic pleurisy affecting the left side. The chest is now contracting, and the heart, which was pushed by the liquid into the right side, has formed abnormal attachments there and remains, although the dislocating cause is removed.

So much for the signs obtained by inspection in pleurisy. I need hardly illustrate again the fact that, in the cases in which we have liquid filling the chest on one side, we have flatness on percussion; and flatness below, with tympanitic resonance above, in the case of pneumo-hydrothorax.

We will, next, consider the appearances of the chest in cases of emphysema. In ordinary pulmonary or vesicular emphysema, as you know, the air-cells are abnormally dilated; the ratio of air to solids is increased; the lungs are rarified, and generally, they are enlarged in volume. The upper lobes are the seat of this affection in the majority of cases. Both upper lobes are usually more or less affected, but one lobe more so than the other. We have, therefore, in a well-marked specimen of this affection, dilatation of the upper portion of the chest, the form becoming more rounded than in health, or, as Rokitansky calls it, barrel-shaped. This appearance and other changes I will illustrate by a patient whom I now introduce. In this case, the characteristic appearances are as finely exemplified as in any case which has fallen under my observation. Were it proper to apply such a term to a deformity due to disease, I would say that you have now before you a beautiful specimen of the visible characters of emphysema.

You observe that the chest on both sides, at the upper and middle thirds, is bulging, and that the lower portion seems greatly contracted. This contraction at the lower portion is, in part, only apparent in consequence of the upper portion being dilated, but it is partly real, *i.e.* the action of the diaphragm has, in reality, contracted this portion. Observe that the head is thrown forward and the patient appears to stoop. On looking at the chest behind, you see there is a considerable anterior curvature of the spine. This is one of the changes due to the disease, and in some cases it exists even to a greater extent than in this case. The patient being thin, the eye readily follows the direction of the ribs; and you will observe that, at the dilated portion of the chest, the ribs, instead of pursuing an oblique direction downward, are nearly horizontal. You see also that the intercostal depressions, at the lower part of the chest, are deeply marked.

So much for the appearances relating to size and form. Now, direct your attention, if you please, to the movements of the chest. You perceive, as the patient now breathes, the movements are mostly limited to the lower portion of the chest and abdomen; and you perceive that, instead of being dilated, the chest at the lower portion is contracted with inspiration. This is still more apparent as I cause the patient to breathe forcibly. As I do this, if you direct your eyes to the upper and middle portions of the chest, you will observe that, in place of the superior costal movements which have been pointed out as belonging to health, the ribs and sternum together rise and fall as if they composed one solid piece. This is because the horizontal direction of the ribs and the dilatation of the chest have lessened the angle formed by the junction of the ribs and costal cartilages, so that the action of the costal muscles is exerted on the sternum and ribs together and not confined to the latter chiefly, or entirely, as in health.

I now percuss the chest, and you perceive the exaggerated, vesiculo-tympanitic resonance which belongs to emphysema. Auscultation, also, furnishes corroborative signs.

So fine an example of the signs of emphysema, obtained by inspection, is not often met with. When these signs are as marked as in this case, inspection is quite sufficient for the diagnosis. You must not infer the absence of emphysema because these appearances are not as well marked. They are presented in every gradation, as regards prominence, and the less they are marked, the more we are dependent for the diagnosis on other signs, obtained by percussion and auscultation, taken in connexion with the history and symptoms.

Inspection furnishes certain signs in cases of pneumonia. In the early period of this disease, if pain from co-existing pleurisy be present, the movements of the affected side are restrained, as in primary pleurisy, and for the same reason. Subsequently the affected side is dilated in proportion to the extent to which the volume of the lung is enlarged by the inflammatory exudation. In cases of pneumonia extending over an entire lung, the dilatation is sometimes considerable, and the respiratory movements are considerably restrained. If, as is sometimes the case, liquid effusion into the pleura take place, the enlargement and diminished movements are still more marked. Finally, after recovery there may be some contraction of the affected side.

Partial enlargements of the chest, determinable by inspection, occur in various affections. Enlargement of the præcordia is observed in certain cases of dilatation of the heart and of pericarditis. Enlargement occurs over aneurismal and other tumors. An enlarged spleen causes projection of the lower part of the left side of the chest. This is well shown in a case now in one of my wards, the patient being too feeble to come up into the amphitheatre. The same effect is produced on the right side by the enlargement of the liver. In some cases of enlarged liver, the organ extends upwards and dilates the lower part of the chest to such an extent that the patient may be supposed to have chronic pleurisy. I was once requested to see a patient, under these circumstances, with reference to the propriety of opening the chest. Inspection alone is generally sufficient to show that the dilatation is not due to liquid within the pleural sac; it is confined to, or is disproportionably great at the lower part of the chest. But if there be room for doubt, percussion suffices to render the diagnosis positive.

Inspection discloses, in cases of obstruction within the air passages, a sign indicative, not only of the fact of obstruction, but of its amount. This is a sinking in, during inspiration, of the parts of the chest which yield most readily to atmospheric pressure. It is seen first in the space above the clavicles, *i.e.* in the supra or post clavicular region; and, next, at the inferior and anterior portion of the chest on both sides. In cases of membranous croup, acute laryngitis and œdema of the glottis, in proportion to the amount of obstruction to the passage of air into the pulmonary cells, the space above the clavicles is drawn downwards when the patient inspires, the lower portion of the sternum is depressed and the sides contracted. The effect of opening the trachea in a patient suffering greatly from laryngeal obstruction, is very striking—the immediate and large expansion of the chest contrasting strongly with the appearances just mentioned. Depression above the clavicles is also observed in some cases of emphysema, an affection involving obstruction from the over-distension of air cells with air. The lungs in this affection being already dilated with air, the action of the diaphragm draws them downwards, and this creates a tendency to a vacuum at the other part of the chest, and consequent depression of the soft parts above the clavicles.

In conclusion, inspection affords important information in cases of pulmonary tuberculosis. An effect of the deposit of tubercle at or near the apex of the lung, is to diminish the volume of the part. We would not perhaps have expected this result, but clinical observation shows its occurrence. I suppose that the affected portion of the lung becomes contracted because the deposit cuts off the supply of air to more or less of the lobules, and thus occasions their collapse. Whatever may be the explanation, we know that this result is apt to occur, and in proportion as the volume of the upper part of the lung is diminished, the walls of the chest in this situation are depressed. Depression of the chest, therefore, at the summit, in the infra-clavicular region, is one of the signs of a tuberculous deposit, and is to be observed in some cases early in the progress of the disease. It is more or less marked in different cases, according to the extent to which the volume of the lungs is diminished. In advanced tuberculosis, the depression at the summit of the chest is apt to be still more marked, because, at this stage, there is an actual loss of substance, owing to the destruction of lung substance in the formation of cavities.

Diminished expansive movement in inspiration is another result. This is attributable, in part, to the depression, and, partly, to the pleuritic adhesions which very generally take place over tuberculous deposits. The superior costal breathing movements are lessened on the affected side, and this becomes a sign of value in the diagnosis of tubercle. It is present in a pretty large proportion of cases, and not infrequently at an early period in the disease.

I shall now introduce several patients, and you will be able to verify the signs just referred to. As you inspect them in succession, if you compare the two sides of the chest at the summit, as regards relative size or fulness and expansive movement with forced breathing, the disparity will be apparent. But in practising inspection with reference to this comparison, two precautions are important. *First*, You must examine sitting or standing directly in front of the patient, and with a good light striking directly, not obliquely, on the chest. You cannot observe correctly standing on either side of the patient. In this position the summit of the side most remote from you will often appear to present more expansion, although it may actually have less than the summit nearer you. You will readily satisfy yourselves of this fact if you examine patients standing successively in front and on one side. *Second*, You must take care to satisfy yourselves that the normal symmetry of the chest exists, before considering these signs as due to disease. A slight lateral curvature of the spine may cause an undue prominence at the summit on one side, and an undue depression on the other side, and the movements on the latter side will be restrained. I shall introduce a patient who shows flattening and diminished superior costal movements on one side. The patient is tuberculous, but the deposit of tubercle is on the opposite side to that presenting the signs just mentioned, as proved by the signs obtained by percussion and auscultation. Directing our attention to the spinal column in this case, we see that there is a slight lateral curvature, and this explains the apparent incongruity of the signs obtained by the different methods of examination.

[A number of patients were introduced, showing depression and diminished mobility of the summit on one side, and the fact of tuberculous solidification corroborated by percussion.]

I have said that in comparing the two sides of the summit, as regards size and movements, it is important to place yourselves directly in front of the patient. There is another position in which a disparity, if slight, is sometimes more apparent. It is a position behind the patient, in which you can look downwards (the patient sitting) across the chest. A comparison, especially as regards the superior costal movements, may be advantageously made in this manner.

An examination of the anterior surface of the chest, with reference to the signs just considered, should never be omitted in cases in which it is desirable to bring all available evidence to bear on the question as to the existence or non-existence of tubercle—a question of vast importance to the patient. We may also obtain some valuable information by an inspection of the chest from behind. In directing your attention to a posterior view of the healthy and symmetrical chest, I pointed out an equal elevation of the scapulæ on forced breathing. Now, in certain affections, this upward movement of the scapula on one side is restrained. The two sides present a disparity in this regard. The scapula on the affected side is less raised than its fellow, or remains motionless, while that on the other side is more or less raised, in pleurisy, before and during effusion, and when the affected side becomes contracted after recovery. The same is observed in cases of pleurodynia and intercostal neuralgia. A disparity is also observed is cases of emphysema in which one lung is more affected than the other. It occurs, also, in cases of pulmonary tuberculosis. On the side to which the deposit of tubercle is confined, or in which it is most abundant, the upward movement of the scapula is apt to be more or less restrained. You will see this fact exemplified in the cases which we have just examined by inspection of the chest in front.

You observe that in some of these cases this sign is marked; in others it is slight, and in some it is not apparent. It is not a constant sign in cases of tuberculosis, and varies considerably in different cases as regards the degree in which it exists; but it is to be included among the number of signs, derived from the different methods of examination, which may concur in rendering the diagnosis of tubercle positive, or, on the other hand, the absence of which may enable us to decide that the patient is not affected with this terrible disease.

The attention of the profession was called to this sign by Dr. Corson, in a paper read before the New York Academy of Medicine and published in March, 1859. I have not mentioned it in my work on the respiratory system, published in 1856, but I was led to observe it shortly afterwards, and have ever since been accustomed to refer to it in teaching physical exploration. I state this without any desire to claim priority, or to diminish the credit due to Dr. Corson, with whom the observation was doubtless original, and who was, so far as I know, the first to point it out in a published communication.

COMMENCEMENT OF THE
MEDICAL COLLEGES OF NEW YORK.

SESSION OF 1861-62.

COLLEGE OF PHYSICIANS AND SURGEONS.

INTRODUCTORY ADDRESS BY PROF. T. M. MARKOE.

PROF. MARKOE commenced his remarks with a warm greeting of welcome to those who were about to commence their studies in the institution, and after reviewing, in a general way, the demands which would necessarily be made upon their energies, industry, and perseverance in the pursuit of their labors, proceeded to speak of the rewards which they might calculate upon as the legitimate return for such exertions.

In regard to pecuniary compensation he was compelled to acknowledge that some were niggardly enough in their notions to undervalue the services of the physician, but this he was convinced was the exception and not the rule; and taking into account every contingency, the physician's fees were such that, with due industry and attention, he could, if he proved acceptable in his administrations, maintain himself and his family in the social style and rank to which his education and scientific acquirements entitled him. Further than that it was not safe to indulge in any prognostications of monetary success.

Passing from the consideration of this subject, he next sketched in the following language, the scientific gratifications which the practice of the profession holds out as a reward to its votaries.

"The scholar, the lawyer, the merchant, the artisan, are often, perhaps I might say generally, earnest, and sometimes enthusiastically absorbed in, the thorough mastering of the subject matter of their life's daily duties. This is a feeling which is entirely independent of any considerations of livelihood, or maintenance, which the successful performance of those duties will secure. It is an attraction in the thing itself, which buries the scholar in his books, which trims the midnight study lamp of the advocate, and which sets in action the whole of the merchant's mental energy, that he may compass the laws which regulate those commercial interchanges upon which his success or failure will depend. Different from, and in fact an addition to, that overmastering importance which is imparted to all our endeavors by the consideration of the result to which they tend, this interest in the duty itself has a power to lighten life's labors, to elevate its pursuits, to ennoble its drudgery, and to extract a pleasure even from the weary treadmill of daily labor. In this respect, the practitioner of the medical art is pre-eminently favored. There is a charm and an interest about his pursuits, which begin with his earliest studies, and have no end but with the faculties of his mind. Each opening page in his preparatory studies presents a new attraction to his desire for knowledge, and each case which presents itself in actual practice, offers a problem to be solved, both as to its nature and as to its management, which cannot be settled by mere reference to the catalogue of routine. To him, therefore, who proposes to do his professional duty in its highest sense, each case involves a careful mental scrutiny and elaboration, which will afford ample and pleasurable exercise to his highest intellectual attainments, and which the strictest rules of philosophy, in guidance of a thorough and well digested knowledge, can alone bring to a safe conclusion. Nothing more strikingly distinguishes the good practitioner from the indifferent routinist, than the clear distinct conception of the nature and relations of a given case, as contrasted with the cloudy and doubtful indistinctness of a mind which shows the want of habitual vigorous handling of the subjects presented to its grasp; and nothing can be more different than the scientific gratification of the former when he watches the successful result gradually evolved by his own intelligent and well considered treatment, and that meaner satisfaction of the other, as he hugs himself over a haphazard success, which occasionally diversifies the experience of the most blundering of our brethren. This immediate dependence of successful practice upon scientific accuracy, gives additional interest to this view of our subject, and affords a grateful stimulus to scientific devotion. The man who by early detection of obscure disease is enabled to exhibit successfully the remedies which in a later stage would have proved inefficacious, or he who, from a larger familiarity with the instruments of his art, can happily adapt and vary his remedial appliances, during a long course of tedious and dangerous suffering, has his immediate and daily reward, not less in the relief and comfort of his patient, than the gratification, which every noble mind must experience from the exercise of such heaven-derived endowments.

"But still further, this faculty of elaborating and individualizing cases of disease, strengthens by its daily exercise, and when earnestly cultivated, in connexion with appropriate and careful study, repays us amply, in a facility, a promptness, as well as accuracy of judgment, which soon incorporates itself as a permanent intellectual attainment, and which is of incalculable value, where we are called on to deal rapidly with large numbers of cases of every grade and variety of disease. Even in private practice we are occasionally oppressed with the number of urgent and important cases pressing upon us for immediate solution, and it is at such times that our weighty responsibility throws upon us our heaviest professional anxieties. But the high cultivation of the admirable faculty of which I am speaking, has perhaps its most striking exemplification in the public ministrations of those distinguished men who have made themselves really great as clinical teachers. The rapid generalization, the correct appreciation of the value and relation of symptoms, the prompt and decided diagnosis, and the appropriate suggestions of treatment, particularly, if verified by results, cannot fail to excite the wondering admiration of the listeners; and none but those who have tried to imitate the performance can fully appreciate how much and how complete must be the mental furniture, and how thoroughly trained the mental faculties require to become, before one can hope to be either useful or great in this important department of practical teaching."

But this exercise of faculties was not the only nor the principal source of scientific gratification, for each individual had a right to feel that he might add his own contribution to the positive knowledge in the profession, and thus lay claim to the approbation of his fellow-men.

"The desire to stand high in the esteem of one's fellows has in itself nothing mean or unworthy. The approbation of the wise and good has, even from heathen times, been the object and aim of those who pretended to virtue or bravery in the state or on the field. How much of the incentive to life's duties would be taken away, if we abstract the approbation of life's witnesses. What would have been the Olympic stadium, deprived of the encouraging shouts and the hearty plaudits of the excited audience; and what a barren certificate of merit would the victor's crown have been regarded, if that simple chaplet of leaves had not signified the applause, and concentrated the envious admiration of the then known world! There is something intrinsically noble in this desire of fame, this longing after earthly immortality. It removes a man from the confused and sordid present, and causes him to live in the calm and glorious future. It disposes him to view his actions, and to regulate his conduct, not by the immediate suggestions of passion or interest, but by the severer censorship of future accountability. The consequence, therefore, or perhaps I should say, the direct effect, of living with the future thus always in view, is so to regulate the life, to intensify its purposes, to dignify its aims, to energize its endeavors, to secure in the end the crown of honor, while at the same time the whole career feels and illustrates its influence in present reputation and in the consciousness of duty well performed. Our profession offers us the fullest scope for this honorable ambition."

Independent of this species of gratification there was a form in which the esteem of our fellows was the more immediate reward for services rendered, and this had reference to the relationship existing between physician and patient. With the blind and sometimes unreasonable confidence in the physician displayed by the patient, was mingled the grateful appreciation of the kindness and success of our efforts, and those returns of affection and confidence flowed out with such readiness and heartiness that they were too often apt to act dangerously on the mind of the young physician, by feeding his conceit and luring him from the purpose of earnest and laborious devotion. But to him who rightly appreciated such a recompense, it constituted the noblest incentive to action. In the further consideration of this subject, he remarked:

"Finally, I present to you as the source of our highest and best reward, our privilege and our opportunity of doing good. Every man who fills with courage and fidelity his allotted station in life, may do good in many ways to those with whom he is brought in contact; but our life is made up of daily acts of direct and personal beneficence. The record of each day's work is one of comfort and relief administered to the mental, moral, or physical sufferings of our patients. This is our daily employment, our acknowledged duty, our professional business, so much so, that the public feel justified in estimating us according to our success in affording this relief and comfort, which we offer them as our stock in trade, our merchandise, for which we claim a price. I would not insult your judgment by making any sentimental claim, on the part of our profession, for disinterested benevolence over all other men, nor do I care to disguise the fact that we practise our art for a pecuniary consideration which we regard, and which the law acknowledges, as a strict mercantile transaction; but I do claim it as an honorable distinction, that our art is thus exercised in the immediate assuagement of human suffering, and that the honor and glory of our science is measured directly by the good which it teaches us to accomplish. I do claim that its beneficent ministrations are of themselves ennobling to the mind and to the heart of him who, in the right spirit is daily occupied with them; and I do most especially claim, that the heart consciousness of having faithfully fulfilled our office of mercy, is, in and of itself, our most certain, constant, and soul-cheering reward. And this is true, or may be true, equally in those cases where our science can bring a positive alleviation, as in those sad instances where our art is unavailing to turn aside the fearful course of fatal disease. The kind word of sympathy, the cheering expression of encouragement while hope yet remains, the tender watchfulness even when hope has fled, and that comforting presence and countenance, which in the solemn hour of approaching death is all that human aid can offer; are none the less appreciated as acts of heart-sustaining kindness, because they may be ineffectual in averting the dreaded calamity or even in manifestly prolonging the struggle with the great enemy. In these sad scenes we have at least the sad satisfaction of having smoothed the dying pillow, and of having afforded to the stricken survivors the mournful consolation that all that could be suggested by professional science, or accomplished by professional skill, has been done to avert the inevitable blow. And here, gentlemen, we have a professional reward which is sure beyond contingency, and full beyond measure, and one, too, whose payment is entirely independent of our patients' appreciation of, or gratitude for the services we have rendered. Milton has ingeniously said, 'that the grateful mind by owing, owes not, but still stands indebted and discharged,' meaning thereby that the very fact of grateful recognition of an obligation was its actual payment, in the coin of gratitude; and so we may say and feel that our duty is its own reward, and that in this sense we by paying, pay not, but receive our recompense in the very act of professional skill or kindness; a recompense whose certainty depends alone on the fact of duty's performance, and whose fulness can only be measured by the heart devotion which has prompted it.

In this respect, have we not, in some degree, the advantage over all other callings in life? The lawyer may have the good fortune to render services to his client in saving his property, in vindicating his character, or in establishing his innocence, which no arithmetic can express, and no money can repay. The labors of the divine may be of infinite, of eternal value to some, to many of his flock. The merchant may be the distributor of wide-spread charity, and possibly the conferrer of princely benefits on whole communities and nations. They may each have the advantage over us in the magnitude of the results they may occasionally reach; but our advantage over them lies in the fact, that while these are with them only occasional results, with us every professional act has an element of kindly sympathy with human ill, and of careful study and earnest endeavor to avert it. It is this peculiarity which stamps its character on the life of the good physician; and the laws of moral science warrant us in maintaining that the daily performance of these benevolent duties, and the constant presence of these humane motives and sympathizing sentiments, cannot fail to humanize the mind, to elevate the character, to soften the heart. And I am bold to say, that our profession has amply demonstrated the ennobling influence of its daily pursuits in the lives and conduct of its individual members. To say nothing, though much might be said, of the private virtues of the representative men of our calling, has not their devotion to duty spoken for itself in every time of public trial or calamity, when the cry of suffering, or the call of danger has reached their ear? and is it not a noble, a glorious professional spirit, which would hold a man a foul craven, who would shrink from duty through fear of miasmatic contamination, pestilential exhalation, or the perils of the deadly battle-field?"

In thus picturing the professional future of those who listened to him, he wished to be understood that such rewards could only be realized by a diligent, unwavering, and self-sacrificing devotion to science, and that their experience would always verify the truth of the motto, "*Palma non sine pulvere.*"

UNIVERSITY MEDICAL COLLEGE.

INTRODUCTORY ADDRESS BY PROF. JOHN T. METCALFE.

After alluding to the pleasant relations which must necessarily exist between teacher and student, he pointed out the immense advantages which New York possessed for the didactic and clinical study of medicine. Large fields for clinical study were offered in Paris, Vienna, London, and other populous cities of Europe; but second to none of these was our own great city of New York, the heart and living centre of the new world, unparalleled in history for rapidity of growth in wealth and social importance. Of but as yesterday, in comparison with the great cities of Europe and Asia, we see its population reckoned by millions—its wharves fringed with a forest of masts, from which float the ensigns of every commercial nation of the globe—its port, the gateway through which passes that wonderful stream of immigration, constantly flowing towards our hospitable shores, filling our noble and extensive institutions of charity with wanderers from other lands, who need no other recommendations to our sympathy and care than those furnished by poverty, sickness, or misfortune. In this city there were constantly, in public hospitals, about three thousand patients requiring medical and surgical aid, to the bedside of whom the student was always welcomed by the attending physician. The Emigrants' Hospital, at Ward's Island, contained fifteen hundred beds. In those of Blackwell's Island over ten thousand patients were annually treated. At Bellevue, the average number of beds was nine hundred, and in the New York Hospital four hundred. And not only was this immense number of general cases presented for investigation, but special hospitals abounded, in which the diseases of almost any organ may be studied. To the Nursery and Child's Hospital of Randall's Island over two thousand children were admitted during the past year. In the Eye Infirmary and Ophthalmic Hospital, nearly four thousand cases of diseases of the eyes were treated annually, and the affections of the ear, genitalia, lungs, heart, etc., might be seen in immense numbers in the various dispensaries.

Having taken it for granted that the student about to enter upon the study of medicine had previously sufficiently qualified himself by a proper preliminary education, Dr. M. was prepared to offer him advice as to the manner in which he should prosecute his future labors. "The foundation which should support the superstructure of your future medical education, is composed of anatomy, physiology, and pathology. Upon these three bases, more especially the former, rests all medical knowledge. Without a full appreciation of them, surgery, midwifery, and therapeutics must be practised in an empirical and uncertain manner. It is by no means rare to see the young and ardent student, ignorant of this groundwork of his calling, plunging, in the very beginning of his collegiate course, into the observation of disease at the bedside and the study of its remedies. No good can come of so irrational a course. By its pursuit many an excellent physician has been dwarfed into a routine giver of drugs, an empiric, in all but the name. During the first session of your medical studies, do not give much time to hospitals, dispensaries, and other clinical fields; but rather devote your time to the three departments that I have named; and for the better understanding of these, do not neglect the indispensable aid of chemistry. A steady attendance upon the lectures of the other departments of the Course, and upon the various cliniques given in the College, will give you a certain acquaintance with the branches of which they treat, which acquaintance, in your second and third courses, should be ripened into a thorough and intimate knowledge."

To the advanced students he had somewhat different advice to give. Having thoroughly acquainted themselves with anatomy, physiology, and pathology, they were then prepared to study disease at the bedside, and understand the language in which it was written. The progress of the case, its complications, termination, and sequelæ, could then be carefully gathered, until in time the student became capable of predicting, preparing for, and perhaps preventing them.

As an illustration of the errors that might be committed from a want of clinical experience he related the following anecdote which he had received from a medical friend:

"The body of a stalwart sailor was laid upon the floor of the dissecting-room, and soon surrounded by a group of students whose attention was attracted by a tumor of peculiar size, occupying the right cheek. This the entire class examined with the greatest care, the second-course students, especially, making sundry learned diagnoses, much to the admiration of their less-learned associates, whose wonder grew apace at the rapidity and confidence of the judgments pronounced by their seniors. As but too often happens 'the doctors disagreed;' some were convinced that the tumor was an osteo-sarcoma, some that it was the result of periostitis, while others sagely expressed the belief that it was of cancerous origin, and had been growing for many years. All had excellent reasons for their opinions, but it was difficult to account satisfactorily for the existence of such a tumor in an individual apparently so free from other evidences of disease. Just then the demonstrator entered, and was called upon as umpire. He examined the tumor, passed his finger into the mouth *(which had not been done before)*, and brought forth, to the chagrin of the previous investigators, *a formidable quid of half masticated tobacco!*"

Prof. Metcalfe also referred to the following case narrated by one of the English writers:—"A young physician was sent for in great haste, to a gentleman in London, whom he found upon his arrival lying upon the floor of his parlor, surrounded by his weeping family, who momentarily expected his death. The doctor, at once, with great promptness and certainty, recognised that the patient had fallen a prey to the fearful and often fatal disease, phrenitis. In accordance with the teaching of his time, he at once bled him, shaved his scalp, and applied over the tonsured surface a large blister. Having done this, he condoled with the afflicted friends, and left, to return next day. What was his surprise on his next visit to find his dying patient seated in bed, presenting the mingled appearance of a penitent monk and an enraged gorilla. You may judge of the doctor's horror at learning that on the previous evening his patient had been *very drunk!*"

Such errors, continued Dr. M., would be disagreeable and mortifying; but there are others of a graver character, awaiting the inexperienced physician, which may leave him a prey to remorse and sorrow, that a lifetime of good works cannot remove. "The world's censure may be overcome, or it may cease to trouble; but the tongue with which the still small voice of conscience speaks, will never be at rest. Persons, not of the medical profession, labor under a belief that errors resulting in evil to the patient are easily forgotten by the physician. Trust in no such hope, it is a delusion and a snare. The mind conscious of rectitude may forgive the faults of others, but with its own it is as relentless as was Brutus with his sons. The misery given to others, and to the physician himself, by a single error, is plainly shown to you by the following instances:—

The elder Delpech practised in Paris, where he attained an enviable position among the first surgeons of the world. One day he was called upon by a young man, who desired to be operated upon for a varicose state of the spermatic veins. The operation was performed on both sides, but unfortunately the ligature which compressed the diseased veins likewise held the spermatic arteries. Atrophy of the organs which they supplied occurred, with what result I need not tell you. The mind of the unfortunate youth brooded over this terrible mishap, day and night, and his brain, crazed by sorrow and mortification, he thirsted for revenge against the surgeon by whose hands it had befallen him. He procured a dagger, waylaid Delpech, who, unconscious of wrong, and unmindful of danger, pursued his usual course of duty, and rushing upon him as he left his carriage stabbed him to the heart.

One more instance. Dr. Dease of Dublin was called to see a case, supposed to be one of aneurism by all the physicians who had attended it, and upon careful examination determined it to be a large collection of pus, overlying an artery. Taking the responsibility, in spite of the advice of those who consulted with him, he plunged his knife into the pulsating mass. There was a gush of matter, and the patient, who looked a short time before upon his case as hopeless, was entirely relieved. Much credit was justly the meed of Dr. Dease, and great gratification must he have felt at thus relieving the unfortunate sufferer. Some time after, he was sent for to another case, which, like that just mentioned, had been regarded as an aneurism; and, as in the other, he decided that it was a collection of pus, and proposed relief in the same manner. This being assented to, he penetrated the tumor with his knife, when out rushed a torrent of blood, and with it the life of the patient. He had erred in his diagnosis. *It was an aneurism, not an abscess!* Dr. Dease returned to his home, and on the next morning was found upon the floor of his chamber with his throat cut from ear to ear, by his own hand!

Sometimes the most skilful and careful will be led into error by deceptive appearances; *very often* will the inexperienced be so. How many would have been deceived, for example in the following case:—A young gentleman consulted a friend of mine, and gave the following history of his case. He had had inflammation of one of the inguinal glands, for which his physician had used tr. of iodine, externally. Suppuration occurring in spite of this, an incision had been made, and the accumulated pus discharged. But the abscess had again filled very rapidly, and his physician having left the city, he wished my friend to relieve him. Upon examination of the spot indicated by the patient, it was found reddened from the recent use of iodine, a scarcely closed incision showing where the pus had been discharged. Upon palpation, the abscess seemed again to have filled, but to the experienced touch of the examiner into whose hands he had fortunately fallen, a peculiar, elastic softness was noticed which caused him to pause with his knife, already in his hand, and examine further. To his surprise he found that a *hernial protrusion had occurred just under the seat of the abscess!* Had he entered this with his knife, death or a miserable infirmity would have been the almost inevitable result. How many would have been deceived by such a case!"

In conclusion, he remarked that every facility was offered for the advancement of the student; and diligent application to the work was all that was necessary to make him an accomplished and successful practitioner.

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

INTRODUCTORY ADDRESS BY PROF. C. A. BUDD.

The introductory lecture was delivered on Monday evening 21st inst., by Prof. C. A. Budd. The attendance was large, the lecture-room being filled. The exercises were opened with prayer by the Rev. Mr. Ewer. After a few general salutatory remarks—alluding to the reciprocal relations which exist between the public and the medical profession—the lecturer proceeded to address himself particularly to the class, dwelling at length upon the importance of their so comporting themselves during their student life, as to lay the foundation upon which the superstructure of a good reputation was to be erected. When alluding to the facilities which New York offers as a centre of medical education, the Doctor spoke somewhat in these terms:—"Prominent in this plethora of things, instructive to the novitiates in medical science, appear the Metropolitan Colleges and their faculties; the old and the new—the time-honored and the *new spirited*. Each, without invalidating the claims of the others, presents its own. If the principle of choice has not been decided on, the student will be perplexed; but in any case of choice, he cannot go far wrong. If he will rightly avail himself of the facilities any of them offer, he will insure his due advancement. No one of them can monopolize advantages to the exclusion therefrom of the others, nor claim so decided merits as to entitle them to pre-eminence. To specify any one of them, is to identify certain *peculiarities* rather than particular merits belonging to any one alone. The great distinction between them will be found to exist in the characters of individual professors, *as instructors*, rather than in the school as such. Of all these seats of medical learning you have made your choice, no undue estimate has been volunteered of the advantages belonging here. We present you two chairs which are wanting in other schools (referring to the chairs of Infantile Pathology and Ophthalmic Surgery)."

The Doctor then proceeded—referring to the division of the chairs of obstetric medicine and of surgery—first exemplified in this school. In speaking of the improvements which have taken place in the *mode* of teaching various departments, he said—"Thus, there exists the most radical line of demarcation between the physiology of the past and the present. The physiology of the past was mainly inferential, that of the present is experimental, positive, and certain; not because we know all to be known; but because what we ascertain is uniform, definite, and reliable. The physiology of the past mainly consisted of what we had *guessed*, of the functions; that of the present consists in operative demonstrations. Our own is one of the few schools in the country in which this immense change in the treating of this department is practised." In an allusion to the civil war now raging in our midst, and the large draft made upon the ranks of civil practitioners, for supplying the army with medical men, the Professor said—"To the higher ranks of this organization, your own college has already contributed one of its faculty. It is our quota, as an institution of learning, to the enlistment" (meaning the recent appointment of Prof. Browne to the post of Brigade Surgeon). Referring to the establishment of a new school, recently inaugurated, he said—"It was a matter of gratulation and not of dissatisfaction, and it is gratifying to find it setting the seal of adoption upon the direct connexion of Hospital and College—first exemplified in this city in this building, * * * * * thus convincing the world at large of the immense utility of what our own school *first* essayed on a minor scale. To these advantages, gentlemen, you are welcomed on the same basis, and with a title equal to that of the students of the institution in question. They are as free to you as though they were seated in your own college grounds." After dwelling upon some of the responsibilities which attach themselves to the medical man, and the necessity of a close and devoted application to their studies, in order to fit themselves for bearing them, the Doctor concluded his remarks in these words—"The twentieth century has nearly come, and the greatest of epochs environs us. Physiology and chemistry are on the wing, intent upon extracting from Nature her hidden sweets to garner them in the hive of medicine. Therapeutics sits like the queen bee in all royalty, while gathering stores promise her a larger province. Shall we, who now own the worth, and dispense the resources of medicine, fail to identify our names with its history? Let the ardor of your studies beget the answer. * * * * * Nor let us wholly forget that He who dictated the terms of our salvation, and showed the way in which the everlasting goal was won, named *himself* the Great Physician. That the touch of his hands, from which positive health spread forth, unsealing the living tomb of blindness, was but the type of the use the physician executes. However distant the goal, the patient study of the phenomena exhibited by the organism in health (its physiology), and in disease (its pathology), is the only means we possess of advancing this pursuit, and our tasks, though not always successful, are manly and even noble.

COLLEGE OF PHARMACY.

INTRODUCTORY ADDRESS BY PROF. MAISCH.

The College of Pharmacy of the City of New York commenced its thirty-second annual course of instruction on the 21st of October, with an introductory address by Prof. J. M. Maisch, late of Philadelphia, but now a resident of this city, and the Professor of Materia Medica in this Institution. The exercises took place in the new rooms of the College, in the University Building.

Prof. Maisch warmly welcomed the students to the College, and expressed the hope that their association in the study of Pharmacy would unite them in their present and future efforts to advance the interests of the profession they had chosen. "On selecting the profession of pharmacy," he said, "you have undoubtedly been aware beforehand, that there is scarcely another one claiming from its followers so much of their time, and demanding such a sacrifice of their comfort; besides it, there is certainly none, that would fetter him to a like extent to the field of his labors. The shop, or, as it is called by other nations with a more dignified name, the office, is the circumscribed place whence he holds his intercourse with suffering mankind, who are desirous of having an infirmity removed, of becoming cured of a disease, and of regaining the most prizeworthy of all earthly blessings, health. The invalid entrusts his bodily welfare, his life, not more to the physician, than to the pharmaceutist; while from the one he expects that he be able to discern his ailings, and to know the remedies suitable for the removal of his disorders, he demands from the other that he prepare correctly the ordinations of the former, and from material which is in reality what it pretends to be, in a pure state, unadulterated and unspoiled, as it is on such medicines that the physician bases his expectations. There is, therefore, a grave responsibility attached to every duty which the pharmaceutist has to perform, the most simple of which wants to be done with accuracy and with a due regard to the object in view. It would be easy enough to point out many such duties, each of which may, perhaps, appear insignificant, and its enforcement oppressive, if not odious; but let me tell you, gentlemen, that there can scarcely be enough vigilance exercised by your preceptors to fit you for the responsible stations to which you may soon be called after you shall have left this hall, and been honored by a diploma from this College, testifying that you have attained that proficiency which must entitle you to the confidence of all with whom you may come in contact in your professional capacity. To fit you for such a station by laying a scientific foundation to your pharmaceutical education, and by pointing out to you the road which will lead to distinction and eminence, such is the object of the College of Pharmacy so far as it relates to the pupils, and to carry out this design, the College has provided for an oral instruction in pharmacy and its accessory sciences, while the manual experiments and labors are left to be performed in the shop. These labors are, indeed, only the practical application of those theories that will be taught to you, so that, whatever you do at home during the continual routine of business, may be done understandingly."

He then passed to a consideration of the rank which Pharmacy holds among the sciences. It differs from other sciences in this, that it combines science and trade in the daily duties of a single profession. Botany and chemistry are the allies of the pharmaceutic art, and the study of the one advances our knowledge of the others. Pharmacy is also closely allied to the healing art, and though the Pharmaceutist is not called upon to prescribe for diseases, yet to him the patient looks for the faithful preparation of those remedies which are to restore him to health.

Referring to the practical duties of the Pharmaceutist, and the bearing of the present course of instruction upon them, he said:—"These manipulations which you are practically taught behind the counter, will be explained to you in our course of oral instruction, together with the principles upon which the apparatus are constructed. It is an important matter to know the construction of our balances and to be able to test their accuracy, and it is not of less moment to ascertain the correctness of the graduated measures which are in constant use behind the counter. You are aware that it is not indifferent of what material the symbols of our profession, the mortar and pestle, are made; the various operations to be made in, and with the aid of the mortar, necessitate now a very tough and hard material, and exclude in another instance all mortars made from any one of the metals. The mortar which is suitable for the preparation of solutions and ordinary mixtures, may be entirely unfit for triturating together the substances ordered by a physician for an ointment. It requires considerable experience to select at once the best adapted mortar in all cases. Not only the material, but also the shape of the mortar is of great importance for the successful performance of the various manipulations. Filters and strainers are in daily use by the pharmaceutist; heat is constantly employed by him in making most of the pharmaceutical and chemical preparations, and fitting the crude drugs for the various purposes for which they are intended. The nature of these operations frequently renders them rather complicated; mostly, however, they are very simple, or may be simplified if we are beforehand sufficiently acquainted with the rationale of the processes and all the incidental phenomena. It will be a part of our object to call your attention to the circumstances and conditions for a correct execution of all these manipulations, and to point out to you the causes of frequent failures and the means to avoid the same. I have given you a rough sketch of our theoretical course on the manipulations in pharmacy, as they occur in the daily routine of business. Pharmacy, as applied to the wants of the public, will of course receive a full share of our attention. When the prescription of a physician is presented at the counter, it is not only necessary to be acquainted with the technical terms constantly employed by the devotees of the healing art, but the prescription must be understood, and after careful reading, we must have decided on the order in which the ingredients are to be compounded, so as to arrive at the object in view. Merely to mix the ingredients in any accidentally selected way, may be done by any one able to read the prescription and the labels of the shop bottles, no matter how ignorant he may otherwise be. But the intelligent pharmaceutist will, with his practical eye, perceive the difficulties which are to be overcome, and his experience and knowledge will point out to him the proper way. When a young man, after having served his initiatory time to the apothecary's business, in which chiefly his manual labor is called upon for exercise; after having become practically acquainted with most of the manipulations and with many of the drugs, and their galenical preparations; after accuracy in everything has become a conscientious duty to him; when such a young man is admitted to the responsible place behind the prescription counter, ample opportunity is there offered to him for quick and correct observation, for gathering a stock of knowledge which, under the many perplexing occurrences at this place, will find him always ready to surmount them. No matter how small the bulk of the medicine may be, in whatever form it may have been ordered, however easy it may be of preparation, the unsoiled vial containing a simple aqueous solution, neatly put up, the neat box with its perfect pills, the ointment of uniform smoothness, the even surface of the plaster—all medicines sent to the bed of the sick and suffering truthfully testify to the sleepless watchfulness of the pharmaceutist, and to the care which has been bestowed upon the preparation of the medicine, and both will soon build up a reputation which to preserve, yea, to increase, must be the ardent endeavor of all followers of pharmacy. The materials from which the pharmaceutist prepares the medicines, are derived from the three kingdoms of nature, each one furnishing us with important articles, the correct knowledge of which is imparted by the study of materia medica, viewing all these substances in the light of commercial articles and of remedial agents, examining their physical properties, their chemical behavior, and the points of difference from other similar articles. The inorganic materia medica consist almost exclusively of chemical preparations prepared in the laboratory and readily examined for their purity; these will be fully illustrated in the lectures on chemistry, in which will be taught the general principles of that science, the elements and their combinations, the reactions between the various compounds, the most correct manner for testing impurities and adulterations, the chief points of analytical recognition and estimation, and the mode of toxicological analysis. Organic chemistry will be similarly treated. In this course, strictly pharmaceutic chemistry will receive paramount attention; but those chemicals used in the arts, and particularly those prepared by or passing through the hands of the druggist to the places of their technical employment, will not be lost sight of."

In alluding to chemistry as the most important ally of pharmacy, the Professor reviewed briefly their history—"From time immemorial," he said, "chemistry and pharmacy have been so nearly allied to each other, that they might be regarded as two foster-sisters, reared by one common parent, medicine. More than twenty centuries ago, the business of preparing medicines commenced to separate from the special vocation of the physician; both professions were then in their infancy, and pharmacy was chiefly called upon to collect the vegetable drugs, and prepare the officinal substances into confections and extracts for internal exhibition as well, as also into plasters and ointments for external application; pharmaceutists at that time were almost identical with what we nowadays call manufacturing pharmaceutists, but one advantage was possessed by the former, one superiority over the latter, though the officinal materia medica was then necessarily very small; they had to familiarize themselves with the living plants; they had to possess, though but a limited knowledge of botany, which is scarcely ever practised by our modern manufacturers. At this early time, however, chemical substances were already made use of, only externally at first, for arresting the progress of disease; and among them were some of the most powerful mineral substances and compounds which have increased in use to the present day. Carbonate of potassa, alum, rust of iron, the sulphides of iron, antimony and arsenic, preparations of lead, copper, and zinc, all of various degrees of purity, were made use of; and though the chemical knowledge, in our present meaning of the word, of these early pharmacopœiæ must have necessarily been very limited, still the facts speak well for their faculty of distinguishing between compounds which are frequently very similar in their color and other physical properties. That toxicology was not neglected at this early time, is proved by experiments performed, not with a view of detecting poisons, but for the purpose of studying their effects and finding out preparations for counteracting their injurious influence. One of the most celebrated of these toxicologists was Mithridates Eupator, King of Pontus, in Asia Minor, in whose honor the supposed universal antidote had been called 'mithridate,' and whose memory has more recently been paid respect to by an illustrious botanist, who named a genus of plants Eupatorium, numerous species of which are natives to our soil, and furnish some of the most important popular representatives of our indigenous materia medica. Subsequently, when Islam was in its rapidly ascending course, and the Arabs conquered nations one after the other, until the force of this avalanche was completely broken up by Christian Europe, the natural sciences became flourishing under their fostering care, and medicine, as well as pharmacy, is largely indebted to the skill and the research of the Arab physicians and apothecaries, and their pupils, who flocked together from all parts of the then known civilized world. The 'compositiones medicæ' of Scribonius Largus, written just 1800 years ago, were then superseded, the materia medica was increased by many plants, and new processes introduced for the preparation of medicines, the most influential of which was undoubtedly distillation, then recommended for preparing the hitherto unknown medicated waters. With the ancient Greeks and Romans, apothecaries were merely dealers in substances employed in medicine; as far as known, it was with the Arabs where the first apothecaries' stores were introduced, which, since the time mentioned, gradually became more frequent among this people, and were established, not merely for the sale of medicinal substances, but for the compounding of the prescriptions directed by the physician. With the extension of the political power of the Arabs, their scientific institutions became known in Europe, and among them the establishment of apothecaries' stores exerted the most beneficial influence, because it divided the labor of the physician in such a manner as to give him ample opportunity to devote his whole leisure to the study of the various diseases, and afforded at the same time to the apothecary, the means to pay particular attention to the quality of the drugs, to the best modes of preparing them for medicinal use, and to the proximate constituents valuable or unfit for relieving disorders. The apothecaries were soon surrounded with rights and privileges, and other legal enactments, but no legally authorized pharmacopœia was published until in the year 1498 in Florence. It was about the same time when Basilius Valentinus commenced his agitation in favor of the introduction of chemical preparations into pharmacy, in which undertaking Paracelsus was more successful; and up to the present time, many of the substances then introduced still enjoy more or less reputation, and the list of chemicals is still on the increase. We may date from this time that intimate relation between pharmacy and chemistry, by which both these sciences have reaped an immense amount of benefit."

The profession of pharmacy leads to those scientific investigations which almost necessarily develop the talent of the chemist; and we are not surprised that from the ranks of the pharmaceutist, have arisen some of the most distinguished chemists. Said Prof. Maisch:—"From behind the counter of the pharmaceutical establishments, there have emanated quite a number of men, whose scientific researches upon subjects connected with chemistry proper have caused their names to be inscribed among the most illustrious chemists. And is it to be wondered that such was the case? All the pharmaceutical manipulations present, to a careful observer, so many interesting points which can only be solved by a chemist, that these alone must of necessity encourage deep researches into the laws of combination and decomposition, into the behavior of one chemical compound to another one. Formerly, pharmacy took advantage of the discoveries in chemistry, so far as they related to the medical preparations; but in modern times chemistry, in its relation to pharmacy, has become of such a scientific character as to be identical with chemistry itself, and it may be considered impossible now to become an excellent, nay, even a pharmaceutist of ordinary attainments, unless the principles upon which the scientific structure of chemistry has been reared, have been fully mastered. Among those chemists who served their apprenticeship in a pharmaceutical establishment, there are many who labored hard for bringing on the new era of this science and extending its influence to the various vocations of man. The history of chemistry gratefully records the names and preserves the researches of men, like Kunkel, Scheele, Klaproth, Buckholz, Trommsdorff, Proust, Vauquelin, and others. Used to labor, to hard labor even, they did not spare any exertions in their attempts to inquire into the true nature of matter, and into the behavior to each other of the various elementary substances and their compounds. What careful observation may accomplish in chemistry, is strikingly illustrated by the discovery of the alkaline nature of morphia. Though it may be inadmissible to count him among the great chemists, because he never made chemistry the *special* object of his researches, Sertürner's name will be remembered as the discoverer of a new class of organic bodies, which, within a very short time, acquired an unsuspected importance in medicine, as well as in mercantile pursuits. He undoubtedly has not been the first one who obtained the formerly so-called essential salt of opium, but he is the one who boldly pronounced it to belong to the same class with ammonia, the chemical behavior of which is similar to that of the first known vegetable alkaloid, and of all others discovered in the meantime. How numerous has this class become in our days, which are distant from the time of the discovery several years less than half a century. Now, many alkaloids are employed in medicine, and if we look upon the elegant pharmaceutical preparations which we are enabled to make from them, the comparison with the similar preparations from the crude drugs, particularly as formerly made, will show a considerable progress in the elegance, in the correct apportionment of doses, and in the certainty of effects. And what has led to this discovery? Many chemists, before Sertürner's time, had experimented with opium, several had obtained crystallized bodies, but their true nature was not recognised; it remained hidden to their eyes, and it required the accuracy of observation which must become a second nature to every pharmaceutist, to reveal it."

He then proceeded to point out the obligations of the pharmaceutist to himself, and to his apprentice:—"It cannot be regarded as an excuse," said he, "on the contrary, it is a proof of his superficiality, if a practical pharmaceutist alleges, that he cannot find time for observations. While preparing a mixture, while triturating in the mortar the ingredients for a pill mass, while boiling his plasters, and while distilling his etherial or alcoholic preparations; in many instances opportunity is afforded for witnessing chemical reactions, but always for observing some points which may be of the utmost importance in practical pharmacy. It is here that the pharmaceutist ought to commence his observations, it is here that he can learn correctness and accuracy, two qualities which are not only two essential necessities for him in his intercourse with the public, but both are also requisite, so that a reflecting logic may afterwards unite the disjointed facts into one harmonious doctrine. The preceptor, in faithfully performing the duties which he has assumed towards his apprentices, and who understands the ultimate benefit which he must necessarily derive from his observant and scientifically inclined pupils, will gladly afford them the necessary time, if they know *how* to find time without neglecting the business. He who intentionally does not fulfil his assumed duties, he who disregards the seemingly humble or unnecessary offices incidental to a pharmaceutical life, he who is constantly occupied with thoughts withdrawing his mental faculties and his manual labor from the work required of him behind the counter and in the laboratory, is unfit for the profession of pharmacy, and had better discontinue his attempts at success in it, than waste his time, or make of professional pursuits nothing but a study of how the best bargain might be made, and the most money accumulated. A mind deriving pleasure from the inexhaustible treasures of science will readily succeed in making the principles his own, which lie at the foundation of it; after these have been mastered, it is comparatively easy to erect the superstructure or find one's way through, what at first appeared to be a labyrinth, of conflicting hypotheses and facts. Thus it is with all sciences, but most especially so with chemistry, where new facts and theories are almost daily discovered and searched for. It would then be folly to expect a student, and particularly a student of pharmacy, to be familiar with all chemical compounds and products of decomposition, which have been observed; but what may be expected of him, and what ought to be demanded as a condition for being recognised as a pharmaceutist, is that he be familiar with the processes of the pharmacopœia, that he understand their rationale, that he know how to distinguish similar compounds, and how to detect impurities and adulterations. Do not attempt, gentlemen, to commit this to your memory; it would be but time wasted in an unprofitable and unpromising undertaking; it would be but carrying owls to Athens. In listening to the lectures, understand your teacher when he explains the chemical laws, and after you have reached home, study in your text-books the same subject and repeat the experiments, particularly the tests, again and again, comparing them with the corresponding reactions of other compounds. The facts which you fix in your mind by such actual experiments, can never be obliterated from your memory; their impressigns will remain there for ever. And I am confident there is not one among you who will venture the excuse—I have not the time, I have not the apparatus. Gentlemen, as to the latter, a spirit lamp or a gas flame, a flask, a small retort, a blowpipe, and a few test tubes, is all that you require to begin with; material for examination and for the test liquids, you will find upon the shelves in the stores where you are engaged. But do not perform these experiments superficially, and do not be discouraged if you occasionally fail."

Botany was introduced as an important collateral branch of pharmacy, and the student was advised to cultivate it as the source of numbers of useful remedies. The Professor concluded by urging students to diligence in the improvement of their time, that they might hereafter become ornaments of their profession.

American Medical Times.

SATURDAY, NOVEMBER 2, 1861.

CONSERVATIVE SURGERY.

Scientific Surgery proposes, as the problem of our time:—How may diseased or injured limbs or parts best be preserved? The true reputation of a surgeon is now based, not on the number of limbs amputated, but on the number saved from amputation—not on the amount of deformity created, but on that relieved; and it is interesting to note the multifarious ways in which this problem is being solved by earnest and practical students. Shrewd observers of nature's resources are devising, and cunning hands are executing, in every department of practical surgery, new methods of removing diseased parts and structures, or preserving the healthy, in however close proximity. So well established and well defined are many of the more recent rules in operative surgery, that operations which were legitimate a score of years ago, would to-day be justly accounted malpractice. Let us notice some of the more important advances of conservative surgery.

The regeneration of bone from the preserved periosteum enables us to save the limb in necrosis. The number of amputations in hospital practice was formerly largely increased by those cases of necrosis which involved a considerable portion of the bone of any extremity. If the dead bone was removed by an operation, the periosteum was removed also, and the result was a useless limb. Surgeons preferred, therefore, amputation, in many cases, to the removal of the dead bone, so much would the limb be crippled by the latter operation. It now appears, however, that the periosteum has the power of reproducing the removed bone entire, and in a condition capable of supplying its function. And very marvellous are many of the instances of the reproduction of bone. We may have the entire shaft of the tibia renewed, and the leg restored to its former serviceableness. The radius, with its complicated office of rotation, is equally capable of regeneration, both in tissue and function. The clavicle has thus been reproduced, and has proved quite as useful as in a healthy state. The most remarkable instance of regeneration. is seen in the inferior maxilla, which has now been so frequently produced entire, with the exception of the teeth, that its renewal, when the periosteum is preserved, may always be prognosticated. The rule may be considered established on immutable principles, that in the removal of bone, we may have the vacancy supplied with the same tissue, if the periosteum is preserved. Amputation in such cases, though formerly sanctioned, would, in our day, be an unjustifiable procedure, if performed simply because of extensive necrosis.

The resection of diseased and injured joints enables us to save many limbs which, though not as useful as the originals were, still cannot be compensated by any artificial contrivance. All the joints have been subjected to this operation, and with results such as render it highly encouraging, especially in the upper extremity, if not always advisable, when the question lies simply between resection and amputation. In the Crimean war the mortality of these operations appears strikingly favorable to resections; thus, of amputations at the shoulder-joint one-third died, of resections one-thirteenth; of amputations of the arm one-fourth died, of resections of the elbow-joint one-sixth. Statistics on a larger scale give for excision of the shoulder a mortality of 22.5 per cent., and amputation at the same joint 40.8 per cent.; excision of the elbow-joint a mortality of 22.15, and amputation through the arm 33.4 per cent.; showing that, as a question of safety, excision is to be preferred, at these joints, to amputation, when there is opportunity to choose.

Resections of the hip and knee joints, though perhaps not as well established as the same operation at the elbow and shoulder, are well recognised surgical expedients for saving limbs. Resection of the head of the femur for morbus coxarius has given excellent results, and in military surgery is far more successful than amputation at the hip-joint. Resection of the knee-joint has saved scores of useful limbs, which the older surgeons would have condemned, and may to-day be set down in the catalogue of accepted operations in conservative surgery.

The resection of bones is a method of avoiding amputation worthy of the attention of every surgeon. The individual bones of the tarsus or carpus, when diseased, and rendering the extremity useless, may be removed with the restoration of the usefulness of the limb. The astragalus may be removed with a percentage of about 86 cures, and the calcaneum with a percentage of about 99 cures, in cases where formerly amputation was performed with a mortality of 30 per cent. Gunshot wounds of the articular extremities of bones are now not to be treated by immediate amputation, but by resection. Esmarch has shown that resection of the head of the os brachii should be preferred to amputation when even four inches of the bone are involved, the resulting limb being useful.

The free opening of joints, now so confidently asserted by some to be harmless, and as strenuously denied by others, may yet relieve us from the necessity of amputation in those cases in which the larger joints are involved in injuries. In military surgery the rule of treatment in gunshot wounds fracturing the articulating ends of the bones entering, for example, into the knee-joint, would be immediate amputation of the thigh. But if it is proved that the joint may be freely laid open in such cases, the fragments removed, and the wound treated as an open sore, without endangering the life of the patient by the complication of a suppurating joint, a great point is gained, and fewer amputations of the legs will be performed hereafter, both in civil and military practice. We believe the day is not distant when this will be the established practice in injuries, and in many diseases of the joints. In military surgery Stromeyer has already put it to the test by laying the front of the knee-joint freely open, as if for exsection, in a case of gun-shot wound, with encouraging results. The frequent accidents in which the entire joint is exposed, and yet complete cures are effected, with no unfavorable symptoms, confirm this opinion.

The rule to save as much of the limb as possible, when amputation is inevitable, is a prominent feature of the surgery of our day. Its advantages are especially seen in the lower extremity in the amputations at the ankle-joint. The simple methods of Syme and Pirogoff, by which the limb is rendered nearly as serviceable as with the foot complete, illustrate well the advance of our art.

We have thus pointed out some of the methods by which conservative surgery is accomplishing its beneficent mission. We could adduce examples from every branch of practice, but these may suffice. It is the duty of every student to follow confidently the indications of scientific surgery, and of every practitioner to become a co-worker in this field of service, imbued with the feeling that his highest duty is life and limb conservation.

We are destined by Providence to add a chapter to the history of surgery of no mean importance. The older nations, in their long and bloody wars, have given ample scope for the cultivation and improvement of surgery, and well have these opportunities been improved. Surgical science has been gradually advanced, its rules better defined, and its resources enlarged. At length, while other nations are at rest, we are called upon to perform our parts in the bloody drama of civil war. We have already passed through scenes which may well lead to the anxious inquiry—Are we prepared to make our acts memorable with heroic deeds of life conservation? Are the surgeons of our army, in whose hands now rests the honor of American surgery, and not less the reputation of surgery as a science, fully instructed in all the resources of their art, and thoroughly prepared to use them to advantage? We believe the result will prove that scientific surgery has not suffered in our hands. Our confidence in the genius of American medicine is so great that we do not hesitate to predict that the resources of surgery will be greatly amplified, its conservative tendency carried to its extreme limit, and new fields opened and largely cultivated. But our anxiety is as to the present state of preparation of the great majority of those who now occupy the responsible positions of surgeons to our volunteer forces, to meet the exigencies of the first great conflicts which are impending. Careful study of the best authorities will aid much, but practical experience can alone fully qualify the regimental surgeon.

It is gratifying to notice that the claims of conservative surgery are fully recognised by surgeons filling high official stations, as appears from the recent army order of the Medical Director of the Department of the Potomac. The direction therein given proves, that the most advanced doctrines in scientific surgery are thoroughly appreciated by the official medical head of that portion of our army, and are to be adopted so far as practicable.

THE WEEK.

In many of the older countries where the science of medicine is recognised as having an important bearing upon the solution of many questions relating to the public interests, Central Sanitary Boards are established. These Boards have cognisance of all matters pertaining to the public health, such as the location of public buildings, churches, schools, the prevention of nuisances, vaccination, &c. Of the great importance of such an Advisory or Executive Board, to which may be referred all questions of this nature, there would seem to be no doubt, and many foreign Governments have such organizations in intimate relations with the public authorities. We have great need of such Central Sanitary Boards connected with our State Governments, which shall exercise a constant surveillance of the public health. Most of the States have large districts rendered insalubrious by marshes susceptible of drainage, and by water courses interrupted, &c., which, with enlightened sanitary supervision, could be rendered permanently habitable. Innumerable instances are suggested in which such a Board could render invaluable service to the State; but we have at hand a case which so strikingly illustrates the need of an executive body of this kind, that we prefer to quote it. The Medical Officer of the Lunatic Asylum of this State writes the following urgent letter to a gentleman of this city, well known for his devotion to sanitary science:—

"Will you please give me your opinion of the propriety, in a sanitary view, of building pig pens, for over one hundred hogs, to occupy one half acre of the walled yard (wall 14 feet high, containing five acres, appropriated for the use of this asylum, the hogs to be fed with the refuse from a neighboring institution; said pig yard is to be within two hundred feet of the main building of the asylum, and on the side from which the wind usually blows. I write to you this request for the purpose of persuading the inspectors to stop a project which has just commenced, and will ruin this institution if it goes on. I wish you would give me your opinion, not for *my benefit*, but for weight with officials."

Here is a large institution, devoted to the treatment of the insane, about to be rendered utterly useless for the successful treatment of this susceptible class, by a nuisance placed adjoining it by the authorities. For, next to the exhalation of privies, the emanations from hog sties is considered the most injurious to the health of individuals, and the effect upon the health of the insane would be disastrous. If we had a State Board of Health, such questions would be referred to it, and a beneficent public institution would be saved from total ruin.

The adventurous explorer, Dr. Isaac Hays, on his return from the Arctic expedition, was warmly greeted by the Medical Society of Nova Scotia, at Halifax. A dinner was given on the occasion at the Halifax House, and a number of distinguished guests were present. The President of the Society, Dr. Jennings, presided, and introduced Dr. Hays in the most flattering terms. Dr. Hays, in responding to a toast, stated his belief in the practicability of reaching the Pole, with a steam vessel, and a sufficient force of dogs and men. He proposes to renew the attempt another year. Several members of the profession, both English and French, addressed the company, all alluding, in terms of warm commendation, to the career of Dr. Hays, and congratulating the profession that it could claim as a member one so devoted to scientific exploration.

College of Physicians and Surgeons.—We learn that Prof. R. Cresson Stiles, M.D., of the Berkshire Medical College, will lecture on physiology in this school during the absence of Prof. Dalton at the seat of war.

Reviews.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES: including the Results of recent Investigations upon the Subject. By FREEMAN J. BUMSTEAD, M.D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York, Surgeon to St. Luke's Hospital, &c; with Illustrations on Wood. Philadelphia: Blanchard & Lea. 1861.

SUCH is the comprehensive title of a new work recently issued from the press of the well-known Philadelphia publishers, Blanchard & Lea; and we propose in the following paper briefly to analyse and comment upon it. If any one wonders why at this particular period there should be put forth a new book upon a subject which has already received a large share of attention from medical observers and writers, it will only be necessary to refer him to the author's preface, which seems satisfactorily to explain the reasons which impelled him to prepare the present treatise. "The additions to our knowledge of Venereal," we quote from the preface, "during the last ten years, have been numerous, and in the highest degree important. Among the most remarkable, may be mentioned the distinct nature of the two species of chancre; the innocuousness of the secretion of the infecting chancre when applied to the person bearing it, or to any individual affected with the syphilitic diathesis. The removal of certain obstacles to a general belief in the contagiousness of secondary lesions; the fact that syphilis pursues the same course whether derived from a primary or secondary symptom, commencing, in either case, with a chancre at the point where the virus enters the system; the definite period of incubation of the true chancre, and of general manifestations; the inefficacy of the abortive treatment of syphilis; and the phenomena of syphilization and their correct interpretation." Surely, the half of these topics, in consideration of their importance, would warrant the writing of such a treatise, for which our author, however modestly, claims only the character of a collection "from the pages of medical periodical literature in our own and foreign languages," through which they are scattered.

Viewed merely as a compilation, we should consider Dr. Bumstead's work one of great value, inasmuch as it brings together and arranges systematically the latest and most thorough investigations with their results. But it is much more than a compilation, the author having drawn largely upon his own experience in venereal diseases—by no means a limited one—and has thus been able to verify and confirm the results of others' investigations, or to show wherein they failed to satisfy the requirements of careful observation and logical deduction. The introductory chapter of the work gives a somewhat condensed history of venereal diseases, which, by the way, are classed under the three general heads of Gonorrhœa, Chancroid or the contagious ulcer of the genitals, and Syphilis. Our author receives and repeats the almost universally credited fact that "gonorrhœa has existed among all nations, and from the earliest times of which we have any record;" and quotes briefly from various ancient authorities in support of the statement. So also with the second class—the chancroid or contagious ulcer of the genitals, which seems to have been familiar to the Greek, Latin, and Arabian writers on medicine.

As to the third, or true syphilis, our author affirms positively that "there is no record in history of the existence of general symptoms prior to the year 1494." This, therefore, he assumes as the date of the first appearance of syphilis; and as we shall have something to say upon this point in another connexion, we shall defer any further notice of this portion of the work, unless it be to mention that the author's "review of the history of venereal diseases furnishes conclusive proof that gonorrhœa and syphilis are not dependent upon the same poison" (p. 34); and again (p. 36) "for all practical purposes, the idea that gonorrhœa is identical with syphilis is exploded."

Dr. B. divides his work into two parts. The first devoted to gonorrhœa and its complications; the second, including, for the sake of convenience, and in accordance with common usage, both the chancroid and its complications, and syphilis. It were desirable to have the name gonorrhœa discarded from medical nomenclature, because it is incorrectly applied, and conveys an erroneous idea. Still its use has become so general, and its significance in the original so little regarded even if understood, that perhaps any attempt to substitute a different term might be productive of more confusion and misunderstanding than would be compensated by any more correct and definite appellation. Everybody in (as well as very many out of) the profession knows perfectly well what is meant by the word gonorrhœa, and our author has therefore wisely preferred to treat of it under its usual demomination, rather than to exercise his ingenuity, and confound his readers by coining or adopting some polysyllabic epithet which would send one to his Greek Dictionary to ascertain its significance.

Causes and Nature of Gonorrhœa.—Besides the ordinary origin of this disease, from intercourse with a person of the opposite sex affected with it, our author insists upon other sources, and adduces from his own experience and that of numerous other writers on the subject, an array of facts and arguments going to prove the non-specific nature of the cause in very many instances of gonorrhœa. We commend his remarks (pp. 46–55) to careful attention; for the subject is one of vast importance, and bears very strongly upon points which medical men are often called upon to decide, and upon this decision may turn the happiness, the character, and even the life of a patient. We are sure that no candid physician, after reading the pages above referred to, will refuse his assent to Ricord's proposition, "Gonorrhœa often arises from intercourse with women who themselves have not the disease."

In regard to *treatment*, our author's directions are full, clear, and minute, and embrace all that is known and approved upon this point at the present time. We refer the reader to the work itself for further information, our limits not permitting extended quotations.

The chapters following are devoted to a notice of the complications and sequelæ of gonorrhœa, among which are gleet, balanitis, phymosis and paraphymosis, swelled testicle, prostatitis, cystitis, ophthalmia, rheumatism, and stricture; all of which are ably discussed, and the last is treated at considerable length, and with evident care. The medical student will find here all that it is important to know; and the active practitioner who wishes to bring up his knowledge on this subject to the latest standard, may with advantage consult Dr. Bumstead's work, and save himself much time and labor in hunting over authorities. The illustrations scattered through these chapters contribute very materially to a clear and ready understanding of the operations and processes described in the text.

The second part of the work is appropriated to "the Chancroid, its Complications, and Syphilis." This branch of the subject, in any treatise on venereal, is of course by far the more important, but in the work under notice it is especially so. It is upon this that our author has laid out his strength, and upon this must depend his reputation as a medical author; and before entering upon the regular perusal of the book, we would strongly urge any person who may glance over this article, to read carefully the introductory remarks with which Dr. B. has prefaced this portion of the work. The author has succinctly and clearly laid down four characteristics of the class of diseases termed "infectious," under which syphilis is ranked, and proceeds to take "a general view of the disease under these aspects, before entering upon a consideration of its various symptoms in detail."

1. The presence of a morbid poison or virus. Though the existence of a specific syphilitic virus has sometimes

been called in question, the evidence in its favor is so overwhelming that it cannot now be reasonably doubted, and, in short, we may say it is universally admitted. But now comes a question, which until quite recently would have been altogether scouted by the profession, at least in modern times, and which, indeed, for the past ten years, has decided the opinions of surgeons and physicians. It is to the generality a novel question, but so important is its bearing upon all that relates to the history, pathology, progress, and treatment of the disease, that our author very properly devotes particular attention to it, and quotes largely from various authorities on the subject. Not to detain our readers, the question is, "Is there more than one kind of syphilitic virus?"

Dr. Bumstead takes the affirmative, and in the pages which follow (pp. 328 to 348) supports his views in a manner which we unhesitatingly admit is convincing to our mind. Indeed we do not see how the opponents of this doctrine can explain away the facts, or demolish the arguments brought in its favor.

It would seem that this doctrine of the duality of syphilis, which we have characterized as new, if we may believe Bassereau and other writers, is an old doctrine revived, and that upon the appearance of what must now be termed true syphilis, in the 15th century, it was looked upon as a new disease differing altogether from the ordinary symptoms of the venereal affections then and previously prevalent; and a very interesting resumé of medical opinions and statements bearing upon this point may be found in the work under notice. We do not propose to go into a differential analysis of the two diseases. This our author has well done in his work, to which we would again refer the reader. We pass on to notice another characteristic of syphilis as an "infectious disease," viz. "the immunity which one attack generally confers against a second." This is the well-known law in regard to all diseases which are both contagious and constitutional, and our author goes on to show that in this respect true syphilis furnishes no real, though perhaps some apparent exceptions. This doctrine has so many important practical as well as theoretical bearings, that its consideration should receive the most thorough and strict attention from medical men. Dr. Bumstead has accordingly endeavored to set forth briefly but clearly its claims, and in our opinion has succeeded in establishing, to say the least, its entire probability. With regard to the two remaining points in this connexion, a regular "period of incubation;" and a certain degree of "order and regularity in the evolution of the symptoms"—which we usually see appertaining to the class of infectious diseases, our author has presented some very instructive and interesting statements, which we fancy will prove quite new to the majority of our readers, or at least to those who have not paid special attention to this branch of medical science.

In chapter second, our author takes up the subject of chancres, which, as before observed, he divides into two classes. The "chancroid"—a local and contagious ulcer, which, being most frequently transmitted in sexual intercourse, chiefly affects the genital organs."

The "chancre"—the initiatory lesion of acquired syphilis arising at the point at which the virus enters the system, and separated from the general manifestations of constitutional infection, by a period of incubation."

The "chancroid," then, is a simple, local ulcer, generally appearing upon the genitals, capable of being inoculated indefinitely on the same or any other person, giving rise to no constitutional symptoms, and capable of being thoroughly eradicated from the system. The "chancre," on the other hand, is "the initiatory lesion of acquired syphilis," incapable of inoculation upon the same person, or any other affected with the same disease; giving rise to constitutional symptoms, which also are contagious, and very obstinately persisting for months and years, often in spite of energetic and unintermitted treatment, whether with or without mercury. The former is the sore, with a soft base, apt to be followed by an inflammatory suppurating bubo. The latter an indurated ulcer, giving rise to indolent, non-suppurating bubo. The former is often seen in groups of two or three—the latter generally single—and the former is found to occur in much greater relative frequency than the latter—the ratio being 3 or 4 to 1. Such is, briefly, the description of the two kinds of ulcer, which have so often been confounded as one and the same disease, and treated as well as described under the common name of chancre, and to the want of a clear discrimination between them may be ascribed, in our opinion, the wide difference in the views of medical men, with regard to their treatment—the fierce controversies which have been waged between "mercurialists and anti-mercurialists," and in short, the uncertainty and doubt which have long hung over this branch of medicine. We rejoice to believe that these doubts and uncertainties are fast vanishing, and the true light begins to shine under the efforts of men, who, like our author, have devoted sharp eyes, cool heads, careful observation, and patient research to the elucidation of the mystery.

But to resume our analysis of the work, which, to do it full justice, should be much more extended and minute than we propose in this paper; our author goes on to speak of the different varieties of chancre, using this term generically. Of these he makes five: the simple, infecting, mixed, gangrenous, and phagedenic. Our limits permit merely this enumeration. Next follows the subject of bubo, and in chapter fourth we are introduced to the highly important subject of general syphilis. A brief review of this portion would necessarily be a very imperfect one, and we therefore prefer simply to state that, taking for his text the proposition that "general syphilis always follows a chancre," our author proceeds (in pages 450 to 494 inclusive) to set forth the results of modern investigations upon the subject, and in the course of his remarks we find, what in our view are some of the most vitally important as well as highly interesting features of the work, and these too, upon which the greatest ignorance—we were about to say, but perhaps should use instead the phrase, least clearness of knowledge—has prevailed, yes, and still prevails. This portion includes the doctrine of the contagiousness of secondary symptoms, the asserted fact that syphilis pursues essentially the same course whether derived from a primary or secondary symptom; the doctrine of a period of incubation, with various other topics, all worthy of the closest study.

Next comes the treatment of syphilis, and here our author is clear, full, and minute, giving the results of his own practice, as well as others celebrated in this specialty. The important subjects of mercury, iodine, and their compounds are ably discussed, and Dr. B. points out very definitely the indications for, and methods of using them to the greatest advantage. Of course our readers will prefer to get all these from the work itself rather than at second-hand, and we therefore pass them by, stopping only to say a word about the novel process of "syphilization," as it is termed. This, which means simply the inoculation of the secretion from a syphilitic ulcer upon a healthy person by way of prevention, or upon a diseased one with the object of cure, was first put in practice upon anything like a large scale, by Sperino, an Italian physician at Turin, in the year 1851. In 1853 he published a work upon the subject, in which he reports ninety-six cures by this operation. As the process is one not likely to meet with very general favor, at least in this country, until better established by repeated experiments, we shall say but little in regard to it. As a preventive, the practice of syphilization has been abandoned even by its author; as a curative agent, it certainly seems worthy of trial in those obstinate cases of constitutional disease which have been through the ordinary methods of treatment unsuccessfully; anything, it seems to us, would be better than to drag out a miserable existence with so loathsome a disease as constitutional syphilis pervading the system, and affecting every portion, even to skin and muscle, bone and sinew. Now as the syphilization or inoculation of syphilitic virus is performed only with the matter taken from a chancroid (for if our author's theory is correct, true syphilis is not auto-inoculable), it introduces into the system no new or increased constitutional poison, but gives rise only to a local sore, which, as we have before stated, will heal under almost any treatment, or, in fact, in the absence of treatment, and therefore occasioning no more inconvenience than vaccination, it certainly would be preferable to enduring the horror of the prolonged and terrible disease which its advocates propose thus to cure. In our judgment, therefore, syphilization, if not immediately adopted, should by no means be condemned without further trial.

We have drawn out this paper to so great a length that we are compelled to pass over many things in Dr. Bumstead's book which appear worthy of notice. But every intelligent reader will easily discover these for himself. We need hardly say that we have been very favorably impressed by the work, and regard it as a most valuable addition to syphilitic literature; and as a practical treatise too, we cannot but consider it timely and appropriate. For, opinions upon the nature of syphilis being so diverse, its treatment could not be termed well settled. We believe this treatise will come to be regarded as high authority in this branch of medical practice, and we cordially commend it to the favorable notice of our brethren in the profession. For our own part, we candidly confess that we have received many new ideas from its perusal, as well as modified many views which we have long, and, as we now think, erroneously entertained on the subject of syphilis. Among these, is the idea of abortive treatment as applied to a true chancre. It has been, and still is believed by the majority of the profession, that if a chancre can be submitted to appropriate treatment within the first few days of its existence, before, as they say, "it has had time to pass into the system," it may be so effectually destroyed by caustics or excision, that no constitutional affection will ensue. Fortunate, indeed, would it be for many a patient if this were indeed a fact; but if the ground taken by Dr. Bumstead is tenable, even a few hours are sufficient to render abortive treatment nugatory and unavailing. Again, if, as our author holds, syphilis affects the constitution so radically and so deeply, that months and years are sometimes requisite for its removal, how extremely important this fact becomes in a hygienic point of view, and how great the responsibility resting upon those who have the care or education of the young, to warn them against exposure to a disease which may not only embitter their own lives, and poison their own systems, but which long years after even the memory of their sin has vanished, may manifest its presence in their children's children, and to the eye of the experienced medical observer at least, may betray its traces in the third and fourth generation.

It only remains to add, that this book, like most of those which issue from the press of Messrs. Blanchard & Lea, is beautifully printed and well illustrated—a fact, which in no small degree enhances its value, whether it be as a book for reference, or a simple addition to the library.

To sum up all in a few words, this book is one which no practising physician or medical student can very well afford to do without.

Correspondence.

A GOOD SUGGESTION TO SOLDIERS.

[To the Editor of the American Medical Times.]

Sir:—In thinking of our brethren in the army in connexion with the article in your last number relative to malarious prophylaxis, it occurred to me that there was one very fatal surgical disease which might be guarded against, if soldiers could only be reminded at a proper time of the simple means. An empty bladder would very often prevent a wound of that viscus, and its frequent and fatal complication — peritoneal urinary extravasation. There will seldom be an alarm so sudden that the bladder could not be emptied before forming company; and even during actual engagement there are often ample time and opportunity for this purpose. And after a word of explanation to the men once given, a caution from the line officer would accomplish the object. Of course, this could make no part of the "tactics;" there is something very ludicrous in the bare idea; but it is not the less worthy of attention. And if it be worthy of grave suggestion to a captain or lieutenant to carry lint and persulphate of iron, why is it not pertinent for the surgeon in his daily intercourse with these officers to remind them of every means for warding off casualties, or for rendering them less serious? And if I were a captain—a father to a company—I would indulge as much self-complacency in regard to any forethought for the safety of my command as on account of the most brilliant leading or daring *coup de main*.

R.

THE NECESSITY OF A LUNACY COMMISSION.

[To the Editor of the American Medical Times.]

Sir—The true policy of all governments, kingdoms, and states, doubtless is, to aim at an approach to, and struggle for the establishment of the best legal and sanitary provisions for its subjects. In all countries (like our own) based upon a platform of equal rights and justice to all, experience demonstrates that it is only by slow degrees that we are permitted to arrive at the desired end, and while we regard it to be the duty of all to comply with implicit obedience to the existing provisions; acknowledging fealty to the laws of the land, and to the laws of conscience; we find that we have a large population in our midst that acknowledge no law, and that are not amenable to any either within or without. It follows, from motives of sympathy and civilization, to be the duty of civilized countries to provide humane and salutary laws and regulations for this unfortunate class. Until of late, however, but little has been done except to provide the shackle and the cord. An evil spirit had seized the body; a demon had dethroned the mind, and must be controlled; metaphysics were rife with speculation; until at length the study of the corporeal organism began to progress. The seat of the mind was located, and insanity became a study. At first to know its whys and its wherefores was an inextricable labyrinth. And today, viewed in all its forms, aspects, and shades, it is indeed a mystery; and when we consider the fact that we have within our own state over three thousand acknowledged subjects, it may be asked, how many more may there be, who are more or less to be brought under its influence, ultimately to swell the catalogue?

Our institutions and provisions have grown up from necessity, in this department, each upon its own basis, without general system or supervision, and the subject under consideration demands a hearing.

There are two classes, making two grand divisions of these unfortunates—the acute and chronic, a large percentum of the former susceptible of cure or improvement, while the latter is susceptible of little or none. Our public institutions is the place for the former class, and it is to be presumed that if proper local arrangements were made in each county for the latter class, they may be made as comfortable and as humanely cared for as in the public institutions, and at a less expense by a large per cent. It is to be noted, however, that our public institutions would not suffer in this arrangement. On the contrary, they may be made much more useful than at present; a large proportion of their inmates might be transferred to the local institutions, giving place to others suffering for the want of the enlightened treatment they would there receive, but cannot for want of ample provisions to get them there, or place to put them when there. It would be the province of a Commission of Lunacy to regulate all this, and to endeavor to operate with the county authorities to provide suitable apartments and appendices to their already pauper establishments, and in that way obviate the necessity of making provision for other public institutions, a subject which has heretofore been more or less agitated, and which a lapse of time would be sure to render necessary.

The necessity of such a Commission, and such arrangements, has long since been developed and established by some European governments; but it is to be doubted, perhaps, whether it has ever been carried to that degree of perfection that it can be made to be in this country.

The object of your correspondent is not to enter into an elaborate disquisition upon this subject; but to invite the especial attention of your readers to its consideration; to scan in their own minds its merits and demerits; and take such action as they may feel called upon to make.

Yours, etc., L. B. C.

Army Medical Intelligence.

HEALTH OF TROOPS IN MISSOURI.

[Army Correspondence of the American Medical Times.]

Otterville, Cooper Co., Mo., Oct. 16, 1861.

Sir—The Iowa 5th has done heavy work since we arrived in the state, having been constantly on the move; still it has enjoyed comparatively good health. The following is our list of sickness for the month of September, but I attribute a large proportion of the diarrhœa to insufficient clothing. Our regiment as yet not having been supplied with over or under coats, and light blankets, nothing but the best of good natures and strong love for the cause in which they are engaged, could possibly keep men toiling through wet and cold, with so little complaint, when they would be perfectly justified in stacking arms and leaving for home. The intermittent fever list has been large, but that is attributable to the same cause to a great extent, for relapses are frequent, owing to not being properly protected from cold. I am in hopes this will be remedied in a few days, as clothing is daily looked for. The sick list for October has been smaller up to the present time, but three cases of measles have made their appearance in the last three days, and I fear the whole regiment will become infected. Nearly all the Illinois, Indiana, and Missouri regiments around us have been badly troubled, and the Iowa 6th has had two hundred sick at a time, though mostly fit for duty now. Having run the gauntlet for the past two months on this troublesome disease, I was in hopes we might escape entirely, "but our time has come." No doubt another great cause for diarrhœa has been the abundance of green fruit of all kinds, and great variety of nuts, all of which the men will indulge in *ad libitum*, and no amount of caution, advice, or remonstrance avails anything, and I only live in hopes of the evil being remedied when the material is exhausted. Disease thus far has been easily controlled, though the consumption of quinine and opium I fear would frighten the faculty east; but with us the daily demand and consumption, though large, only shows that without it our regiments would be but skeletons in form, and soon cease to exist. Give the western surgeon quinine and opium, and he is prepared to meet most of the ills of life, notwithstanding the balance of his stores may be short.

I wish you would also call the attention of the proper authorities to the furnishing ovens of some description suitable for baking bread on the march. At the, east all the men can be furnished with soft bread from the large towns, but with us, far away frequently from civilization, on long marches we have to carry our flour or pick it up where we can. As yet nothing has been furnished for *baking* except the common little camp pan. Our men have tried it, but either owing to the want of experience of the men, or its inadequacy to the demand, the result has been a miserable failure, the bread being heavy as lead, and the result has been that thirty hours' use added ten men with diarrhœa from one company, and so on. Government has one of two things to do, either to furnish suitable ovens, or send a *Soyer* to teach the men how to use the present apparatus, or they will soon have no army. At present our men, and I presume most other regiments, are using hard bread, but that will not continue long, and we must come back to flour again. Let it be looked to in time. Another great fault with us has been the lack of potatoes and fresh meat. For nearly two months our men have been kept on salt meat or bacon and hard bread or flour. But little fresh meat, very few potatoes, no vegetables, and yet we have been in the midst of abundance of all these, and the army could have been supplied abundantly and kept at two-thirds of the expense, and yet *red tape* would not permit of it. What is the effect? Why, in the land of plenty, with every kind of antiscorbutic in abundance, and cheaper than what is producing the disease, *scurvy* begins to appear among the men in the shape of swollen legs, purpura hemorrhagica, debility, etc. With such a beginning early this season, what may be expected during the winter? There is no reason why potatoes should not be supplied in abundance everywhere, and as to cheapness no one will question that.

Yours, &c.,

Charles H. Rawson,
Surgeon to 5th Iowa Regt. Vols.

Report of the sick and wounded of the 5th Regiment Iowa Volunteers for the month of September, 1861: Febris intermittent, 191; febris remittent, 27; diarrhœa, acute, 157; dysentery, acute, 12; tonsillitis, 3; indisposed, 75; pneumonia, 2; bronchitis, 12; pleurisy, 1; rheumatism, acute, 2; lumbago, 1; nephritis, 1; abscess of arm, 1; furuncule, 2; erysipelas, 1; cholera morbus, 1; debility, 2; conjunctivitis, 7; neuralgia in face, 3; odontalgia, 2; piles, 3; incised wound, 1; gunshot wound in hand, 1; hernia, 1. George W. Cooper died Sept. 16, at Post Hospital, Jefferson City, of chronic diarrhœa; William Barret committed suicide by shooting himself in the head, Sept. 16, on board the War Eagle.

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METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 21st day of October to the 28th day of October, 1861.

Abstract of the Official Report.

Deaths.—Men, 88; women, 81; boys, 186; girls, 100—total, 401. Adults, 165; children, 236; males, 220; females, 181; colored, 7. Infants under two years of age, 176. Children reported of native parents, 84; foreign, 164.

Among the causes of death we notice:—Apoplexy, 7; Infantile convulsions, 31; croup, 5; diphtheria, 4; scarlet fever, 14; typhus and typhoid fevers, 8; cholera infantum, 18; cholera morbus, 1; consumption, 63; small-pox, 4; dropsy of head, 17; infantile marasmus, 26; diarrhœa and dysentery, 16; inflammation of brain, 14; of bowels, 8; of lungs, 24; bronchitis, 6; congestion of brain, 11; of lungs, 8; erysipelas, 0; whooping cough, 4; measles, 8. 212 deaths occurred from acute disease, and 45 from violent causes. 280 were native, and 121 foreign; of whom 82 came from Ireland; 8 died in the Immigrant Institution, and 48 in the City Charities; of whom 15 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

1861	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In	°	°	°	°	°			
20th.	30.00	.24	54	50	66	9	15	N. W.	4	500
21st.	30.20	.17	51	45½	57	9	11	N. W.	3	480
22d.	30.03	.20	55	47	62	6	9	N. E.	5	630
23d.	29.77	.34	54	44	63	5	9	N. E to S W.	6	691
24th.	30.17	.40	46	38	55	8	13	N W to S W.	07	550
25th.	30.44	.37	44	34	53	6	9	N W to S E.	5	617
26th.	30.21	.14	53	48	58	2	3	S. E to N. E.	10	821

Remarks.—20th, Variable day; clear evening. 21st, Fresh wind A.M.; cloudy sky P.M. 22d, Wind fresh A.M.; cloudy P.M.; rain late at night. 23d, Hard rain, early; light at 8 A.M. and 3 P.M.; clear P.M. Rain fall of the 22d and 23d, 61 in. 25th, First ice of the season, early A.M., in exposed places; sky cloudy P.M. 26th, Light rain at intervals during the day, hard late P.M.; amount, 30 in.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture V.—Part I.

Mensuration.—Different Modes of Measurement.—Callipers.—Instrument for Measuring Circumferences of the two Sides.—Quain's Stethometer.—Spirometer.—Palpation.—Information Obtained by this Method respecting Tenderness, Elasticity, Prominences, or Depressions, Situation of the Heart's Beat, Aneurismal and other Impulses, Fluctuation, etc.—Normal Vocal Fremitus.

Gentlemen:—In my last lecture, I considered the signs obtained by inspection and the application of this method of examination to the diagnosis of diseases affecting the respiratory system. I shall now proceed to consider another method, viz. mensuration, or measurements of the chest. We resort to measurements, or mensuration, for precisely the same objects as we do to inspection, to wit, to determine abnormal variations as regards size and movements. In general, we may obtain sufficient information for diagnosis by inspection alone. The advantages of mensuration consist chiefly in the greater accuracy of the information obtained in some instances, and in the greater precision with which we can express the results of the application of this method. In recording cases, and especially if we intend to analyse or report them, it is often desirable to employ measurements; but, I repeat, we may generally dispense with them in practice. In some cases, as we shall see, the information obtained by the eye is more reliable than that obtained by mensuration.

There are several different applications of mensuration. One application consists in measuring the distances between certain parts on the surface of the chest. A graduated tape or rule answers for this purpose. We desire sometimes to measure the distance between the nipple and the median line, to ascertain precisely how far it is removed when the chest on one side is dilated with liquid, or with liquid and air, and how far it is approximated when the side becomes contracted after recovery from pleurisy. So, it is sometimes desirable to measure the width of the interscapular spaces, in order to determine accurately the increased width in the stage of effusion in pleurisy, or the diminished width after recovery. In recording cases, we may wish to express in figures the situation of the apex beat of the heart in relation to the nipple or median line. The size and situation of local enlargements or depressions may be ascertained with greater accuracy by using the graduated tape or rule, than by estimating by means of the eye. This application of mensuration is of more or less importance.

Another application relates to the diametrical distance between opposite points on the chest. Generally, in this application, the object is to measure the antero-posterior diameters of the chest on the two sides, in order to determine the exact amount of increase or diminution on either side. For this object, instruments are used, called callipers. The instrument which I show you is as convenient and simple as any. It is, in fact, a pair of compasses, with long semicircular branches and a graduated scale near the joint. Suppose we wished to measure and compare the diameters of the two sides at the centre of the infra-clavicular region. We should indicate with ink points in front and behind, on both sides, the points to be equidistant from the median line. We then separate the branches of the instrument and apply the extremities to the corresponding points in front and behind, being careful to press the ends upon the integument with the same force on both sides, and we note the separation of the branches of the instrument as indicated on the graduated scale. Care must be taken, not only to press the ends of the instrument equally on the two sides, but to measure each side at a corresponding period as regards the respiratory acts, *i. e.* at the end of an inspiration or expiration; otherwise the comparison will not be fair.

The callipers may be employed to make a comparison of the antero-posterior diameters of the two sides in cases of pleurisy, emphysema, and tuberculosis. They are, however, so far as my observation goes, rarely employed, reliance being placed on inspection.

Another mode of mensuration is to measure the horizontal circumference of the two sides of the chest, for comparison. We may measure each side separately from a spinous process behind, to the median line in front; but it is difficult to make a fair measurement in this way. If we pay no attention to the time of measurement as regards the respiratory acts, and measure one side at the end of an inspiration and the other side at the end of an expiration, the measurement will not be fair. We must cause the patient to hold the breath until both sides have been measured, and this is uncomfortable for the patient, and sometimes even impossible, in cases of disease accompanied by dyspnœa. To obviate this difficulty, we may use the instrument which I now exhibit. It consists of two pieces of inelastic tape attached to a small plate of metal slightly concave, so as to be applied over the spinous processes behind. The two tapes are graduated, indicating inches and fractions of an inch, the enumeration commencing on each tape at the metallic plate. The plate being applied over a spinous process behind, the tapes are brought forward, being careful that each is exactly horizontal in its direction, the median line in front having been marked in ink, and the circumference of each side is observed at the same instant.

If you have not this instrument at hand, it is easy to extemporize one that will answer quite as well, with a little more trouble. A simple piece of tape or cord is passed around the chest in a horizontal direction; a pin is inserted into the tape or cord over the spinous process behind, and the points of union at the median line in front are indicated in a similar manner. The two portions of the tape or cord thus representing the circumferences of the two sides, are then brought together, and the difference in length will show the disparity in size between the two sides. We are to recollect in this application of mensuration, that the size of the right side generally exceeds that of the left side by about half an inch, except in persons who are left-handed.

The semicircular measurement is useful as a means of comparing the size of the chest, from time to time, in cases of pleurisy with effusion, empyema, pneumo-hydrothorax, and emphysema, in this way ascertaining the progress of these affections and the effect of therapeutical measures. This is, perhaps, the most important, in a practical point of view, of the applications of mensuration.

Several instruments for measuring the respiratory movements of the chest have been devised. An instrument contrived by Dr. Sibson is too cumbrous for ordinary use. I hold in my hand a simple and very pretty instrument contrived by Dr. Quain, and called by him the Stethometer. You see that this instrument is of about the size and appearance of a watch. A cord is attached to an interior arrangement by which the degree of movement is indicated by the movement of a hand upon the dial. It is a delicate instrument, but, as it appears to me, it is less reliable than careful examination of the chest by inspection. The cord must be kept in exactly the same amount of tension in measurement of the two sides, else the result is not fair, and it is not easy to comply with this condition. I was formerly accustomed to use this instrument in comparing the superior costal movements on the two sides, with reference to the diagnosis of tubercle, but for several years past

I have preferred to trust to a comparison by means of the eye. If we desire to measure the inferior costal and the abdominal movements, we may employ the tape used in measuring the semi-circumference on the two sides. Measuring each side, successively, at the end of a full inspiration, and a forced expiration, the range of motion is ascertained, and the two sides compared in this regard.

As pertaining to mensuration, I will say a few words respecting the measurement of the amount of air expired from the lungs. Some years since, Dr. Hutchinson, of London, invented an instrument for this purpose, which he called the spirometer, with which he made an extended series of observations. He found that the amount of air which healthy persons are able to expel from the chest by a single act of expiration, differs widely, but the amount bears a certain proportion to the height of the person. The amount is diminished by diseases compromising the respiratory function, and, hence, he proposed this application of mensuration as a valuable means of determining the existence, or otherwise, of disease, and of forming an opinion as to the extent of pulmonary disease. The spirometer has never come into much practical use with physicians, but we often see instruments stationed at public places, and passers-by are invited to test the capacity of their lungs for a small fee. It is not of much practical importance in diagnosis, because in the amount of air which can be expelled by a forced expiratory act, the range in healthy persons is so variable, and we do not generally know the capacity, in this respect, of our patients, when in health. Moreover, various causes, irrespective of pulmonary disease, will affect the ability of prolonging the expiratory act; in fact, any cause which weakens muscular power will have this effect. I shall not, therefore, dwell on this application of mensuration, but content myself with showing you an instrument, made by Coxeter, of London, which is designed to supersede the cumbrous instrument of Dr. Hutchinson.

This instrument consists of a large bag made of India-rubber cloth, into one end of which is attached a stop-cock mounted with a glass mouth-piece. The patient expires into the bag through the mouth-piece, prolonging the expiratory act as much as possible. When the act is finished, the tube is closed by turning the stop-cock. Connected with the large bag, at the other extremity, is a smaller cylindrical bag communicating by means of a tube and stop-cock. At the distal end of the smaller bag is an opening with a stop-cock. The larger bag is the reservoir of the expired air, and the smaller bag is the meter. The latter contains fifty cubic inches, and is graduated so that the quantity of air when it is partially filled may be measured. The amount of expired air having been obtained in the larger bag, the meter is filled by opening the stop-cock, and discharged, successively, until all the air is in this way measured. This instrument admits of being rolled up in a compact form, and is contained in a case which may be carried in the pocket.

This concludes all that I have to say with regard to *Mensuration*. I shall next consider the signs obtained by palpation, or the application of the hand to the chest.

We obtain some important signs by palpation. It will suffice to merely enumerate most of them, their applications to the diagnosis of different affections being sufficiently obvious.

By means of the touch we ascertain the existence of tenderness, its situation and extent. The touch alone, as we have already seen in cases which have been examined before the class, furnishes the diagnostic criterion of intercostal neuralgia, viz. the existence of tenderness in three isolated points, situated as follows: on side of the spinous processes behind, in the intercostal spaces on the lateral surface on one side, and near the median line in front. On the other hand, in pleurisy, pneumonia, and pleurodynia, the tenderness is more or less diffused.

We ascertain by palpation whether the thoracic walls everywhere retain their normal elasticity, or whether, owing to the presence of liquid within the chest, or solidified lung, or a tumor, an abnormal resistance is felt on making pressure. This sign has already been noticed in treating of percussion.

Examination with the hand of prominences and depressions apparent to the eye, affords information respecting their size and extent.

We ascertain by the touch the situation of the apex beat of the heart, in cases in which the movement is not seen. We ascertain, also, and judge of impulses due to aneurisms or other causes. Cases of empyema have been observed in which the thoracic walls having become greatly attenuated, the movements of the heart, communicated to the pus, overcome an impulse felt over the whole of the affected side. These have been called cases of pulsating empyema. In some cases of empyema, and even of ordinary pleurisy, the chest being much dilated and the walls quite thin, a sense of fluctuation is obtained in the intercostal spaces, the same as when the abdomen is distended with liquid.

By palpation as well as by inspection, and sometimes when the latter method is not available, we ascertain the abnormal divergence of the ribs which occurs in pleurisy with effusion, and in emphysema, and the convergence which occurs when the chest is contracted after recovery from pleurisy. We can also compare, by means of this method, the depth of the intercostal depressions on the two sides.

In addition to the signs just enumerated, which, for the most part, are obtained by other methods, there are some signs peculiar to palpation. Before I can describe these, I must call your attention to the sensation communicated to the hand applied to the healthy chest, when the person speaks.

Applying the palmar surface of the hand to the chest, as I now do in this healthy subject, either at the summit of the chest in front, on the lateral surface, or below the scapula behind, and requesting the person to count in a loud voice, we generally feel a vibration or thrill, and this is called the normal vocal fremitus. It differs in intensity in different persons. The intensity of the sensation depends on the strength and lowness of the voice, on the thinness of the walls of the chest, and other circumstances. In some persons it is wanting. It is comparatively feeble and frequently absent in females. Is it equal on the two sides in health? It is not. This must be recollected. It is always greater on the right side. The disparity between the two sides is often marked, and it may be absent on the left, although present on the right side.

Original Communications.

PROFESSOR N. R. SMITH'S

MODE OF REDUCING DISLOCATION OF THE SHOULDER-JOINT.

BY STEPHEN ROGERS, M.D.

OF NEW YORK.

The subject of dislocation of the shoulder-joint, and its reduction by the procedure recommended and originated by Professor N. R. Smith, of Baltimore, in his article published in the *American Journal of Medical Sciences* for July, 1861, and of which you have already published a summary prepared by Dr. Janes, can scarcely acquire additional interest to the profession from what I may be able to say about it. Small contributions, however, to the very *large* stock of my early teacher's experience, in this manner of reduction of the dislocation in question, will not, I trust, be unacceptable; instigated as it is by both a desire to add to the favorable record of a valuable surgical operation, as well as to express a pupil's obligation to the distinguished author of the article above referred to. Many years ago, I had the fortune to attend Dr. Smith's lectures on surgery, and to witness in his own hands the reduction of this dislocation, by what he terms *his* peculiar method. If it be true that it is original with him, I owe the Professor an apology, for having, on repeated occasions, made the statement to my professional associates and acquaintances, that it was first employed by his father, the late Prof. N. Smith, of Yale College. I know not where I received that impression, unless it was from himself.* This, however, is unimportant. More than twelve years have rolled away since, and during that period in a very large public practice, as well as private, I have perhaps had a fair average number of shoulder dislocations; and have invariably employed this method of reduction, and with uniformly good success. They have presented themselves under all varieties of surrounding circumstances; but whatever the advantages or disadvantages, whether in the hut of the poor Indian, who had neither bed nor sheets, or surrounded by abundance of all kinds of apparatus, and material of which to make it, the simplicity of the plan always rendered me independent, confident, and easy. But, it will be asked, what peculiar advantage has the professor made out, for his procedure, over other methods practised by excellent surgeons all over the world: that, for example, of employing the unbooted heel as fulcrum placed in the axilla and adducting the arm down over it; or that of raising the arm, and carrying it up to a line parallel with the vertical line of the body, more or less. It is to be regretted that Dr. Smith has not given us his views upon the comparative advantages of these three plans. His can hardly boast of simplicity, when compared with either of the others. His, in any case, requires more apparatus, or more assistants than either of them. This is a decided objection; what then are the advantages? Is it more generally successful? The Professor may have statistics to answer this query, but I have not. Is it less painful? I have every reason to believe it is. Is it less likely to be attended with injury of the muscles and other tissues about the joint than the others? I believe it is. Is it, on any account, more generally applicable to all the dislocations of this joint, than the other plans? I believe it is. My own cases have been almost always relieved of pain during the greater portion of the time occupied in the extension, the only pain of consequence being at the time of performing any manipulations thought expedient. As an operation it is one remarkably free from pain. This accords, I believe, with Professor Smith's experience. As to the injury to tissues involved, the very fact of its being a comparatively painless operation, should be proof enough. But when we look closely at the anatomical relation of the muscles and bones in dislocation into the axilla, for example, it is at once manifest that if the supra-spinatus muscle is not torn and divided at the moment of the accident, it will be, to a certainty, by the manipulation called *the reduction by the heel in the axilla;* and the long head of the biceps will meet a similar fate, and, of course, involve more or less destruction of the glenoid ligament, and injury to the tissues of the joint. Of the capsular muscles only the teres minor, infra-spinatus, and subscapularis, can possibly escape rupture by this method of reduction. If one or all of these muscles and tendons happen to have been torn by the forces producing the luxation, then the manipulation will be more or less easy, and little serious additional injury can take place in reduction by this method. This heel or fulcrum method, applied to the dislocation into the infra-spinated fossa, or beneath the coracoid process, is equally objectionable, always resulting in the violent stretching, and generally rupturing, of the tendon of the infra-spinatus, teres minor, and the long head of the biceps in the former case; and the same long head of the biceps, and the subscapularis tendon in the latter; supposing always that the dislocation has taken place without these accidents, which is *not* always the case.

The objection to the directly upward extension is, that the more you elevate the arm the greater will be the tension, and disposition to spasmodic contraction, of the three powerful muscles spoken of by Prof. Smith, as so instrumental in the production of the axillary dislocation, viz. the pectoralis major, latissimus dorsi, and teres major; and whose united forces will be in great part exerted upon the already stretched, and perhaps slightly torn tendons, of the supra-spinatus, infra-spinatus, and long head of the biceps, and consequently will, in many cases, probably result in rupture of one or more of them. As in the other case, so in this, if these tendons are torn asunder by the force producing the dislocation, the objection to this particular manipulation no longer exists. In old dislocations, where the head of the bone is more or less fixed in its new situation, this manipulation would evidently be one of the most dangerous, in consequence of the great extension of the soft parts involved, the bound-down and constricted arteries included. As to the more general application to all forms of dislocation of Prof. Smith's plan, I have little more to say. But a single case of the rare dislocations has ever come under my care, yet, as bearing upon the subject of this manipulation, if on no other account, it has a value, and I shall give a concise account of it:—

A laborer of fifty years of age was admitted to hospital after a severe debauch, in a physically sound condition, with the exception of some tremors of the muscles of the extremities, and with the complaint of not having slept for three nights. A few hours after admission he was seized suddenly by a violent epileptic convulsion, which was repeated in quick succession two or three times. They then passed off, and he at once complained of pain of the shoulder, increased upon movement. Placing my hand upon the point of the shoulder, I was struck with the remarkably apparent prominence of the acromion process. I at once removed his clothing, and greatly to my surprise found the head of the humerus resting in the infra-spinatus fossa. The patient's declaration that nothing had ailed the shoulder before he came into the hospital, his not having complained of anything in that region upon admission, in answer to questions put him, and absence of all marks of external violence—which in all probability would have been present in case of such luxation from external force, led me to the conclusion that his was a case of dislocation backwards into the infra-spinatus fossa, and produced by muscular contraction purely.

I have little doubt that the dislocation was produced in the following manner:—The patient lying on his back, the attendant, to keep him in bed, seized the arms, carried them outward till they rested on the bed, at right angles to the body, and there held them immovably—the body meanwhile writhing in all the violence of the convulsion. This position of the arm threw the head of the humerus—as it will be seen always to do—backward into the verge of the glenoid surface, and while in that position a violent spasm of the latissimus dorsi drew it off downwards and backwards, which, with the upward counteracting force of the supra-spinatus, and long head of the biceps, placed it in the position above mentioned, the infra-spinatus fossa. So thoroughly convinced was I of the truth of this explanation of the mode of this dislocation, my invariable instructions have since been to attendants, never to attempt to confine a convulsive patient by fastening the arms. The case being altogether so rare a one, I was induced to allow it to remain some hours unreduced, in order that my colleagues at the hospital might assemble to see it.

When all had examined it, a sheet was passed under the axilla of the injured side, carried up over the body and spine of the scapula, to meet the other end, which passed up in front, over the clavicle; crossing them at this point, they were carried across to the opposite arm, one in front, and the other behind the neck. Counter-extension from both this sheet and from the *hand* and *forearm* of the well side, and extension from the hand and wrist of the dislocated limb, was kept up for a few minutes, in an exactly transverse direction, when placing the hand firmly upon the anterior aspect and outer extremity of the clavicle I directed a slightly forward and upward movement of the extended arm to be made; resisting a corresponding movement of the shoulder by counter-force, with my hand as above placed, and the head of the bone almost at once slipped into its place.

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* Since writing the above, looking over Professor Hamilton's incomparable work on fractures and dislocations, I find that he also has the impression that this method of reduction originated with the late Professor Smith, of Yale College, and that he has given as his authority "Medical and Surg. Memoirs" of Nathan Smith, by N. K. Smith, M.D., his son. May not Prof. Hamilton have taken one of Dr. N. R. Smith's articles for one of his father's, Dr. Nathan Smith; as I believe the book contains articles and cases from both father and son?

Why the sheet was employed at all in this case, I am unable now to recall, as my record makes no comment upon it; but perhaps it was that such an extraordinary case was thought to demand corresponding measures. I have always since had my doubts if it was of any service. I certainly should not employ it now, at least not until the more simple method of extension and counter-extension from the opposite arms and hands had failed. It is important to state that the case above related was a *first dislocation*, not one of those habitually dislocating joints easy to get out and facile to return. All my other cases have been the usual dislocation into the axilla, and I have never employed any other extension and counter-extension than that from the hands and wrists of the opposite arm. As to the additional manipulation, I have practised two—one, the knee in the axilla, and the hand upon the acromion acting counter to it; the other by grasping the arm as near to the head of the bone as possible in the interlocked fingers, with the two thumbs upon the acromion. In this position a grasping force can be exercised much more than sufficient to overcome any obstacle that usually presents to the passage of the head of the bone into its place. This lateral manipulation is, of course, to be employed, only after extension has been fully accomplished. It, as Dr. Smith says, will in many cases not be requisite at all, the bone going to its place as soon as extension has brought out the various muscles to their natural length.

Anatomists hardly require the mechanico-anatomical survey Prof. Smith has made of the parts involved in this luxation; but very properly to brighten those whose anatomical learning has become more or less dimmed by the rusts of time he says: "Let us observe the continuity of ligament, bone, and tendon, by which the two scapulæ are bound together and made mechanically dependent upon each other. Anteriorly the two acromion processes are bound together by an unyielding chain of bone and ligament. The fibrous resistant ligaments in this chain are not capable of being stretched. If traction be made from the opposite wrists, the two acromion processes thus tied together are not capable of being drawn asunder to the extent of half an inch." He goes on to say, "Posteriorly the continuity of resisting parts is almost as perfect. The broad expansion of the scapulæ approach each other not remotely, and they are bound to each other by the interposition of the ligamentum nuchæ, and indirectly by muscles and tendons attached to the spine. Traction from the two extremities will not therefore separate the scapulæ to any considerable extent."

For those who are still more curious, I will here give my usual demonstration of the muscular anatomy involved in dislocation of the shoulder-joint, and of course in its reduction, particularly by Prof. Smith's method.

These muscles are physiologically divided into three classes. The first, *those attaching the scapula to the chest or frame*, viz. the trapezius, levator anguli, and rhomboidii posteriorly. The subclavius, pectoralis minor, and serratus magnus anteriorly. The second class are *those attaching the chest to the arm*, and are the clavicular portion of the deltoid —taking the clavicle as a part of the frame—pectoralis major anteriorly, and the latissimus dorsi posteriorly. Third, *those attaching the scapula to the arm*, and are the posterior portion of the deltoid, the coraco-brachialis, teres major and minor, infra-spinatus, supra-spinatus, and subscapularis, and still a single muscle more connecting the scapula and the forearm, *the biceps*. Of the first class, the two great muscles giving the lifting, sustaining power to the shoulder, are directly antagonistic in their action on the scapula, the trapezius drawing backwards and upwards, the serratus magnus downwards and forwards. These two when in action control perfectly the whole expanded portion of the scapula from its neck, and with the pectoralis minor exerting its strength anteriorly and posteriorly from the coracoid process, and the bony and ligamentous connexions through the clavicle at nearly the same point, the scapula is most perfectly fixed to the chest and spine. The remaining muscles of this class are small and unimportant. Now any lateral traction from the arm, tending as it does to separate the scapula from the chest and to sever its attachment to the clavicle, excites to contraction the above-mentioned muscles, and, as one can easily understand, results in fixing that bone firmly to the spine, or central line of the frame. This central line immovably fixed, we have no further difficulty in controlling the scapula, and this of course is accomplished by traction from the opposite arm, which communicates the counter-extending force to the same central points of the frame.

As to the second class, those attaching the chest and arm, their power to dislocate has been described by Professor Smith in these words: "The deltoid violently effects the abduction of the arm, while the pectoral and latissimus, with equal and sudden force, jerk the head downwards into the axilla." He might have added the teres major also. But in my experience these muscles are easily overcome by a little steady extension; and if the arm is not raised suddenly, but brought up to the horizontal position slowly, neither traction in that position nor the position itself will excite such spasmodic actions, and thereby endanger the capsular tendons and muscles already described in speaking of the directly upward-traction treatment. As the horizontal position is much within the limits of the extreme relaxed length of these muscles, there can be no physical reason for their opposing the proposed extension for any length of time.

The third class, attaching the scapula to the arm, are, if not torn at the moment of the dislocation, all relaxed by the proposed elevation of the arm to the horizontal posture; and, from the almost plane surface of the glenoid cavity, not one of these muscles can suffer dangerous stretching by the requisite elongation to permit the head of the bone to mount upon the articulating process of the scapula. The muscle likely to give most trouble is the teres major; but with the moderate management already proposed for the pectoralis major and latissimus dorsi, will exert an equally calming influence upon this; and as its extreme limit of relaxation is much beyond the horizontal position, it theoretically should give no more trouble than the two muscles just mentioned. My experience in the practice substantiates this theory. The only remaining muscle, and perhaps the most interesting one, in this proposed operation, is the biceps. Unlike any of the others, it binds to each other the scapula and the forearm. From this fact it is generally taught and believed that extension of the forearm in any dislocation puts this muscle violently on the stretch. But a careful examination of the anatomy of the part will convince any one that whatever dislocation it may be, simple elevation of the arm will relieve the tension on both heads of this muscle, and that the nearer the head of the bone approaches to its natural position by the proposed extension, the less will be the strain upon them, especially upon the long head, which is the one principally endangered in the accident. Now, as the horizontal or elevated position of the arm is a position of relaxation for the biceps, whatever the position of the forearm, we theoretically would not expect much opposition from this muscle. I believe that the relaxation from this position compensates for the shortening of the long head produced by being drawn out of straight line in consequence of its ligamentous pulley attachments to the groove in the humerus bearing its name. With Professor Smith, I believe that by its contractions it may aid in the restoration of the head of the bone to its place, acting through the ligamentous pulley of the bicipital groove. Theoretically, therefore, it appears to me that Professor Smith's plan of reduction is clearly made out to be more philosophical, more generally applicable, as well as more agreeable to the patient than any other. Practically my experience is remarkably confirmatory of that of the distinguished Professor. As "the proof of the," etc., I have had no reason to be dissatisfied with this method, and now submit these remarks for the benefit of whom they may concern, as I have already said, with gladness that I am able to give a favorable account of the results of my early lessons learned from the lips of this much-respected teacher.

QUININE AS A PROPHYLACTIC IN MALARIOUS REGIONS.

By J. KING MERRITT, M.D.,

LATE RESIDENT SURGEON TO THE NEW YORK HOSPITAL.

As early as the autumn of 1850, my attention was directed to the use of quinine in tropical malarious districts. I was then acting as surgeon of a mining and exploring party, engaged in operations in the Province of Veraguas, on the Isthmus of Darien. The party consisted of northern whites, of different nationalities, such as Americans, Swiss, Irish, and Germans, and besides, native Indians and Negroes. The locality was a miasmatic section productive of intermittent fever, and its collaterals, of somewhat less intensity and less grave a type than the so called Chagres fever. Every one suffered more or less from frequent attacks of malarious disease. The natives, however, were usually affected with a milder and less persistent grade than the foreigners.

In less than two weeks after my arrival at my post, I was myself attacked with a paroxysm of intermittent fever of ordinary severity. About sixty to seventy grains of quinine were taken during the interval, which produced the ordinary signs, such as ringing in the ears, etc. There was no recurrence of paroxysm, but I continued the use of quinine for seven days afterwards, taking, during this time, from fifty to sixty grains. Notwithstanding this amount of quinine taken into my system, I had a repetition of fever in twenty-one days after the discontinuance of its use, whereupon the same ordeal was adopted of taking quinine to point of saturation after first paroxysm, which succeeded in preventing recurrence of fever as before. These repetitions of fever occurred frequently, although the amount of quinine taken was considerably increased after each attack by the longer continuance of its use. I became anxious, because at every attack of fever I was incapacitated for duty during several days (though having only one paroxysm on each occasion), which resulted from the combined depression of fever and quinine to the point of saturation.

I also observed that several members of the mining staff (Germans), who had been six months in service, were liable to repeated attacks of fever, quite as frequent and as severe as during their first month of service, although at each recurrence of paroxysms of fever quinine had been freely used. Besides, they were rapidly acquiring the malarial cachexia, which had reduced their tone of system much below par, and consequently rendered them subject to protracted convalescence. Upon keeping an account of the amount of quinine, which myself and several of the whites, similarly susceptible to malarious influences, had consumed during two months, I found the average per day, of different individuals, ranged from six to eight grains, and yet all were liable to attacks of fever from over-fatigue or unusual exposure—*particularly to the sun's rays*—whenever the use of quinine had been suspended for some time.

It seemed to me, in my own case especially, that the development of a paroxysm of fever was to be studiously avoided, as, during such, there was a sudden accumulative miasmatic force generated, probably of a zymotic character, which entailedure commensurate increase of quinine to counteract it. Accordingly, I adopted the practice of giving and taking quinine daily, as a prophylactic, in the following manner:—At early morning, immediately before breakfast, five grains of quinine dissolved in a fluid-drachm of water, by the addition of a sufficient quantity of aromatic sulphuric acid, were given at a dose. This was generally taken diluted in a wineglassful of clear cold coffee, which, by the way, was the best menstruum in my experience to render the quinine acceptable to the stomach, and to disguise its peculiar bitterness so obnoxious to many. At the beginning of this prophylactic practice, it was very often necessary to repeat this dose at nightfall, as premonitory symptoms would manifest themselves, especially after a day of more than ordinary exposure or fatigue; and on such occasions the quinine was administered in a half gill of whiskey, which was used designedly, because stimulation to a moderate degree has proved beneficial in my experience after an exhaustive day. And here I may remark, that it has also been my experience not to stimulate before undertaking an arduous duty; but when the normal powers begin to flag, then the requisite amount of stimulus is very beneficial and most judicious in tropical malarious countries. After pursuing this course for three months, it was very evident that there was a marked improvement in the general condition of the members of the staff before referred to, and in my own case no repetition of fever. In calculating the average consumption of quinine per day for each individual, it was found to be about ten per centum less than in the previous two months. In my own case I now determined, having become somewhat familiar with the premonitory symptoms of malarial disease, which, I believe, can always be detected by an intelligent and close observer, *for they always exist*, to reduce the daily dose of quinine to its minimum. Also, as the members of the party recovered a fair state of health under the daily full doses, I began to try the same experiment with them by gradually reducing the amount of dose rather than the frequency. Every intelligent member of the party, both northerner and native, was instructed in the rationale of the procedure, and urged to promptly report the slightest variation from the standard of health, in order that the dose of quinine might be accommodated. I may here remark that strict sanitary regulations had been enforced from the very commencement of the operations; and although the status of health of the party generally was better than with other similar parties under like circumstances in neighboring districts, nevertheless sanitary measures, irrespective of quinine, and the mode of its administration, were inefficient to prevent malarious diseases from being developed almost universally among the mining staff and operatives.

The experiment for ascertaining the minimum quantity of quinine required as a perfect prophylactic was continued for three months, and resulted as follows:—That in different individuals the prophylactic dose of quinine is not required to vary as much as the curative dose of quinine, and that with the reduction in the aggregate consumption of quinine of sixteen per centum below that of the first two months, the general health of the party had so much improved, especially with the white portion, that only one fifth of the time was lost from sickness, that was formerly the case. There was in my own case even more decidedly favorable results obtained, such as complete immunity from malarious disease, with the reduction of twenty-three per centum of quinine, and the discontinuance of the daily necessity of taking the bitter dose. This relief from the daily use of quinine was also enjoyed by a few other members of the party, who were more than ordinarily cautious and observing, but the rest would be surprised by the stealthy enemy if allowed to act as their own sentinel.

This almost complete immunity from miasmatic disease enjoyed by the party for more than two years, under the prophylactic use of quinine in diminished quantities, was not the result of acclimation, as there was abundant evidence to the contrary in exceptional cases. For example, whenever a detachment of the party on special service was removed from my surveillance, and from carelessness or other circumstances, the use of quinine was suspended for a time, miasmatic maladies were certain to be developed in the majority. Also, the native, in whom acclimatization must be assumed to be complete, exhibited the benefit of the prophylactic use of quinine, and his dependence on it for immunity from malarial disease, whenever its use was suspended for a greater or less length of time.

In contrast to these results obtained from the prophylactic use of quinine, and to give some idea of the intensity of the miasma pervading this locality, I will mention the case of a gentleman, who became a victim to this scourge of the tropics through a prejudice against quinine. Doctor R——, aged 40, a respectable practitioner of medicine, from spirit of adventure, joined our enterprise. He was enjoying robust health, and was quite prudent in his habits of life. He entertained the notion that the natural powers of his system, with the observance of proper sanitary measures, were able to resist the malarial influences of the country. He was very active and vigorous, and soon became zealously engaged in the mining operations, which gave full recreation to his mind and exercise to the body. In fact, he was a fair example of a hearty man with favorable surroundings and influences to resist malaria. After a month's sojourn, he exhibited the undoubted signs of miasmatic cachexia, and he was warned to use quinine, but would not consent. In the course of the following fortnight these indications increased, when suddenly he was prostrated by a congestive chill from which he never rallied, although heroic measures were then adopted to bring on reaction.

Another illustration of a more extended character I will relate, to show more conclusively the urgent necessity for the use of quinine in this region, and also to give a striking contrast to the results accruing to my party after two years' experience. I will premise, that the mining operations were, after the two years mentioned, disposed of to an English company. A complete mining staff was sent from England to continue the works. It was composed principally of English and Welsh, and numbered twenty-three persons. Everything that science and art could supply was liberally provided in their outfit. Upon the arrival of this party of Europeans, I removed to an adjoining district with an exploring party. The surgeon of the staff was cautioned by myself to practise and enforce strict sanitary measures, particularly the use of quinine as a prophylactic. He partially admitted the necessity, but added, that even if disposed to carry out the plan suggested his superior officers would not sustain him. The result was, that in less than a month there were only five members of the staff, excepting the surgeon, able to perform duty, and three of the five mentioned had taken some quinine at irregular intervals; the benefit of which had been taught to them by previous experience in Brazil and the East Indies. Of the remaining seventeen officers and miners, who had been attacked by the malarial fever, three had died within a week after the paroxysmal development of the disease, and the other fourteen were invalided and sent home, after a month's treatment with full doses of quinine, in a deplorable state of shattered health. In estimating the amount of quinine consumed in the aggregate by the party for the two months' after arrival, and with above-mentioned results, it was found to exceed by a fraction seven grains daily per man. A part of this unhappy result may be ascribed to the free use of stimulants, and negligence of ordinary sanitary measures. These incidents occurred in 1853, and so confirmatory were they of the great necessity to anticipate the explosion of miasmatic impregnations by the introduction of quinine into the system, that it became my settled course of procedure for the six subsequent years, during which I was connected with mining and exploring parties in New Grenada; and it was my good fortune not to have a fatal case or protracted convalescence from malarious disease, either with northerner or native.

In conclusion, my deductions from the experience of nine years' use of quinine in tropical malarious districts are:—1st. That no serious harm to the system ensues from the long continued and judicious use of quinine. 2d. That quinine given as a *prophylactic*, *will certainly prevent the developments of miasmatic disease*, and neutralize malaria already in the system. 3d. That the amount of quinine required to maintain a status of health under malarious influences is much less, when used as a prophylactic, than as a curative after development of miasmatic disease. 4th. That the amount of quinine required as a prophylactic is more uniform, than as a remedy after attack of malarial disease. 5th. That quinine will not always restore to health a person *after repeated attacks* of malarious disease, but will *frequently fail* to prevent malarial cachexia, especially if not removed from the miasmatic influences. 6th. That cold clear infusion of coffee is the preferable diluent for morning dose, and whiskey for the evening dose of quinine as a prophylactic. 7th. That quinine dissolved in spiritus nitri dulcis produces very happy effects when administered during paroxysms of malarial fever.

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OBLIQUE FRACTURE OF THE LEG;

SUCCESSFUL EMPLOYMENT OF MALGAIGNE'S APPARATUS.

By W. L. APPLEY, M.D.,

OF SULLIVAN COUNTY, N. Y.

Mr. J. I., of Cochecton, N. Y., aged fifty-four years, was thrown from a load of hay, August 26, 1861, and fell forward between the waggon and horses; a wheel passed over the left leg, causing an oblique compound fracture, a little below its middle. The wound was over the anterior surface of the tibia, was six inches or more in length, and the fragments of the fractured tibia protruded. I arrived soon after the accident, and with the assistance of my brother, Dr. J. T. Appley, I reduced the fracture, and laid the limb over a double inclined plane. On examination the next day, the fragments of bone could be felt and seen, the upper fragment overlapping the lower. We then applied the adhesive straps, and made extension and counter-extension upon Dr. Neill's plan and others; but could only keep the fragments in apposition for a short time. I then discovered that a little pressure upon the upper fragment by the finger would keep the fracture reduced.

On referring to Professor Hamilton's work on *Fractures and Dislocations*, I was encouraged to try Malgaigne's apparatus for oblique fractures of the leg. I made the apparatus, with the assistance of a neighboring blacksmith, and I applied it with the assistance and approval of my brother, Sept. 7th, thirteen days after the injury.

The reduction each time caused the patient much pain, but the application of the apparatus caused but little inconvenience. This kept the fractured surfaces of the tibia in complete apposition, and the patient was much pleased to exchange the permanent extension for Malgaigne's apparatus. I used no other appliances after this, except Salter's Cradle; the limb was extended upon the double inclined plane, and swung up clear of bed. I had no difficulty in dressing the limb daily, and after the swelling subsided, the wound healed rapidly. I removed the apparatus Sept. 30th, the patient willing to continue its use, if necessary. Oct. 10th, the patient was able to get out of bed.

I was much pleased with this apparatus in this instance, and think I shall never hesitate to apply it in a case of oblique fracture of the leg, either simple or compound, if I find any difficulty in keeping the fragments in apposition by the usual methods.

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Cause of Spina Bifida.—M. Serres explains the production of spina bifida by the theory of arrested development. Certain fossil fishes have permanent spina bifida; and this proves, he tells the Academy, that the lateral portions of the vertebra only are developed, the body of the vertebra retaining its gelatinous form. There are species of fishes now living which present a like condition.—*Brit. Med. Jour.*

Reports of Hospitals.

NEW YORK HOSPITAL.

[Reported by D. B. St. John Roosa, House Surgeon.]

TETANUS FROM SLIGHT INJURIES.—ASSAFŒTIDA TREATMENT.

It will be observed in these cases that tetanus supervened on comparatively slight injuries, and that the assafœtida treatment received a fair trial, and with no perceptible benefit; the symptoms being scarcely if at all alleviated, the disease progressing to a fatal termination.

Case I.—*Compound Dislocation of Thumb.*—William A., æt. 22, Irish, machinist, admitted Aug. 10, 1861 (Dr. Buck, attending surgeon), at 4 p.m. Two hours previously, while in a state of intoxication, fell from a railroad car, producing a compound dislocation of thumb. Patient was unable to state how he fell. He went immediately to a surgeon, who made several attempts to reduce the luxation, but failed. On examination, patient is found to have a dislocation of the distal phalanx of the thumb of right hand. The phalanx protrudes from a lacerated wound. The part is considerably reddened, swollen, and tender. *Treatment.*—Evaporating washes were applied, a slight attempt being made to reduce it by manual extension failing. Sixteen hours after, patient was etherized, and the reduction accomplished after dividing the lateral ligaments. The thumb was flexed, and a bandage applied. Aug. 12th. Bandage was removed, considerable pain and tenderness, wound looked sloughy, poultice applied. 13th. Integuments of phalanx have become gangrenous, bone exposed. Patient's general condition is good, though a little nervous and anxious. 15th. To-day at dinner noticed some slight pain in masticating; no rigidity of jaw. 16th. At 1 a.m., house-surgeon is sent for, and there is found a slight amount of trismus; ordered assafœtida injections, ℥ ss. of the emulsion every four hours. At 9 a.m. trismus is more marked, patient is kept in a quiet portion of the ward. Countenance anxious, pulse 118, and at times jerking and irregular. Intellect unclouded; injections are given every half hour; milk-punch and beef-tea are administered as much as may be, though deglutition is becoming difficult, on account of slight spasm. At 11 a.m. trismus is more marked. There is no opisthotonos; swallowing more difficult. 4 p.m. Has taken considerable nourishment since last note; but the spasms of glottis have become much worse, the injections given every two hours. 17th. Patient's mind remained clear all night; opisthotonos supervened, spasms became more frequent. Treatment was persisted in; but at 9 a.m., during a spasm, he died from apnœa. Tetanus supervened on fifth day after injury. Patient survived thirty-two hours after trismus was observed.

Case II.—*Crushed Toe—Tetanus.*—John J., æt. 14, Ireland, admitted Sept. 2, 1861 (Dr. Halsted, attending surgeon). Half an hour before admission, toes were crushed by a ferry-boat, his foot hanging over the fender. Great and two adjoining toes fractured, with wounds communicating. Some considerable hemorrhage; no shock; slight compress applied; no dressing. 4th. Patient etherized. Great and two adjoining toes amputated near the centre of the corresponding metatarsal bones, upper portion of the foot being much lacerated. Flap consisted entirely of plantar surface of foot; silk sutures used to unite flap. 6th. Patient's general condition has been fair. Sutures removed this morning on account of tension, and parts left to suppurate and granulate; parts held together by adhesive straps. 7th. Ulcer suppurates freely. Poultice. 10th. Doing well until last evening, when hemorrhage occurred from stump. Patient lost about ℥ iv. of blood. Two bleeding points secured, others restrained by prepared lint and peripersulph.; bowels confined. Ordered, ℞ pil. cathart. No. ij. 11th. Bowels not yet moved. Ordered Eccoprotic mixture. Complains of sore throat; some congestion of tonsils; eats well. Ordered expectorant of ipecac and mucilage. 12th. This morning at half-past eight there is noticed some rigidity of lower jaw: no spasms, and patient swallows without difficulty. Countenance very anxious; pulse 92. Assafœtida injections were ordered early this morning, with stimulants and beef tea, and they are continued every hour; bowels costive. Ordered powder of calomel and jalap. Patient is kept very quiet; all visitors excluded. 13th. Trismus not more marked; has swallowed nourishment and stimulants well, but if not taken very slowly, strangulates; pulse 98, quick and soft. C. 2, assafœtida injections given every three hours. 14th. Symptoms continue; he takes considerable nourishment; opisthotonos present; pulse 100; bowels not yet moved. 15th. Patient began to have severe spasms yesterday afternoon; are now coming on every moment; whole body affected in spasms. 2 p.m. died.

Case III.—*Compound Fracture of both Bones of Leg—Tetanus.*—James P., 45, Wales, seaman, admitted May 16, 1861 (Dr. Markoe). Ten days prior to admission received a compound fracture of both bones of right leg. To bring parts into apposition, one inch of upper fragment of tibia was removed. Limb placed on a pillow, and a bandage applied. On admission parts about fracture are in a state of moist gangrene, a granulating ulcer about one inch in diameter communicates with fracture situated at about the junction of upper with middle third. Pulse 164. Tongue furred, brown in centre, white at edges. Bowels costive. Dressings have always seemed tight, and continues thus, causing considerable pain. Since placed in fracture-box, all tight dressings removed, and antiseptics applied. 18th. At 4 a.m. trismus manifested itself. Ordered, ℞. assafœtida gr. iij. Ft. pil. No. xx.; one every two hours; also, ℞. Mag. Sol. Morph. Sulph., gtts. x., every three hours; beef tea, milk punch. 19th. Opisthotonos present. Spasms often occurring. Has taken very little nourishment; at 6 a.m. died. Inception of tetanus twelve days after injury. Death occurred twenty-six hours after.

The attending surgeons in this hospital are unremitting in their warnings against *too much dressing*, in the way of bandages, the temptation to which is so strong, when handsome reverses, in bandaged limbs, are so highly regarded. The case above noted is one in which we may be justly suspicious that more attention was paid to bandaging the limb than curing the fracture.

No post-mortem examination was obtained of the foregoing cases.

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AMERICAN MEDICAL JOURNALS.

THE CHICAGO MEDICAL JOURNAL.

I. Purulent Ophthalmia of Armies. By E. W. Holmes, M.D., of Chicago. II. Case of Amputation of Leg for Large Sloughing Ulcer of Heel and Ankle. By L. B. Brown, M.D., of Iroquois, Ill..

1. The intention of Dr. Holmes in this article seems to be to call the attention of military surgeons to the treatment of the disease by strong solutions of nitrate of silver (℈j. to ℈ijss. to ℥j. water) applied freely to the conjunctiva.

2. Dr. Brown's patient was 66 years of age. He injured his ankle by jumping from a carriage. A large sloughing ulcer of the heel followed, which extending, laid bare the os calcis and lower portions of tibia and fibula. Amputation was resorted to at the point of election: the result was very satisfactory.

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Photography in Medicine.—M. Gerlach of Erlangen announces that he has found out the way to obtain very perfect photographic copies of microscopic objects. As there appears to be no convenient method yet known for preserving animal microscopic specimens, this discovery, if confirmed, must be considered a grand one.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, NOVEMBER 9, 1861.

ETHER AS AN ANÆSTHETIC.

When, some time since, we had occasion to allude to the fact that ether had proved fatal in a number of instances, the announcement was received with much surprise, and more than one incredulous correspondent was moved to inquire on what authority the statement was made. The authority was given, and reference was made to twenty-five cases that up to that time had been reported. The Boston Society for Medical Improvement soon after appointed a committee to report "on the alleged dangers which accompany the inhalation of the vapor of sulphuric ether," and recently this committee discharged their obligations in a lengthy and very elaborate report. That they have had "unequalled facilities" for collecting material this document bears the most unequivocal evidence; and in this respect it may be considered as complete. The report, the text of which appears on another page of this number, is copied from the Boston *Med. and Surg. Jour.* of Oct. 24, and consists of two portions, the text and an appendix of forty-one cases of alleged deaths by ether, upon which the conclusions of the committee are based. The profession is under great obligations to the Boston Society for instituting this investigation, and to the committee for the unwearied zeal they have manifested in the collection of evidence upon the subject of their report.

The questions to which anæsthetics and their uses have given rise, are all of great practical interest, and deserve, as they have received, the most thorough discussion. These agents will never be discarded; and it only remains to be seen, which will finally, after prolonged trial, gain the confidence of the profession. The present position of the two agents, ether and chloroform, may be thus stated:—Ether is slow in its action, requires a large bulk, is disagreeable generally to patients, but is rarely fatal; chloroform acts promptly, in small quantities, is agreeable, but is frequently fatal. The extreme partisans of these agents will doubtless take exceptions to this statement, for it is asserted, on the one hand, that ether acts as promptly as chloroform, is as agreeable, and is *never* fatal; and on the other, Dr. Simpson recently stated that he had seen ill effects from chloroform but twice, and these were slight. Such partisanship in the discussion of a question which is to be determined by observation and experience, is to be deprecated, as it tends to lead astray those who have not large facilities for observation. We must receive with many grains of allowance the conclusions of writers whose opinions we know are preconceived, and should never adopt them without the most rigid scrutiny of the facts on which they are based. Dr. Simpson's assertion of the innocuousness of chloroform will weigh as dust in the balance with those who have witnessed the grave consequences which occasionally follow its administration. And we can but consider it unfortunate in this single particular, without in the slightest way reflecting upon the candor of the committee, that the members of the commission to investigate the alleged dangers of ether, are all residents of Boston, a city which is justly proud of the distinction of giving ether to the world. We could not, on this very account, avoid the curiosity of examining critically the appendix of cases, in connexion with the references, to see how far they sustained the conclusions. We must confess to not a little surprise that some of these conclusions are so positively stated; and we cannot, in justice, pass them without a word of comment.

Although much of the report is occupied with a discussion of the comparative merits of ether and chloroform, with a leaning towards the former not always founded upon an impartial judgment, the real subject proposed for the consideration of the committee was, "the alleged dangers which accompany the inhalation" of ether. And this is the point of chief interest to the profession, viz.:—Has ether ever resulted fatally when used as an anæsthetic? To give the reader a fair opportunity to decide this question for himself, we copy from the appendix of the report the following cases of alleged death from ether.

"1. Hotel Dieu of Auxerre, France, 1847. A man, fifty-five years old, was operated on for cancer of the breast, after having breathed sulphuric ether, and died during the operation with evident symptoms of asphyxia. The ether was inhaled from a Charrière's apparatus. 'The want of care in administering the ether, which was given in a manner likely to produce asphyxia, and the insufficient means used for the restoration of the patient, sufficiently explain the cause of death.'

"2. Mr. Robbs, Grantham, Eng., 1847. Ann Parkinson, aged 21, inhaled sulphuric ether several times, experimentally, preparatory to an operation for removing a large malignant tumor in the soft parts of the thigh. At the first trial, after breathing fifteen or twenty minutes, she became hysterical and comatose for two hours; at the second trial she became comatose in four minutes, recovering rapidly. The next day she inhaled it for ten minutes prior to the operation, which lasted half an hour, and during which she manifested great pain, declaring afterwards that she felt every cut that was made; she was in a state of great exhaustion when the operation was completed, being obliged to have brandy before it was quite over, and more when she was put to bed. She was conscious from the time of the operation to her decease, forty hours afterwards, but spoke in a low, faint voice. All the natural functions were sluggish. At the autopsy it was found that there was some congestion of the brain and lungs, and the blood was fluid. There were no other unusual appearances.

"8. Roel, Madrid, 1847. Dolores Lopez, an intemperate female, aged 50, is in a condition of hectic and has shortness of breath. Inhalation of sulphuric ether for the removal of a scirrhous tumor of the breast, weighing three and a quarter pounds. The anæsthesia was incomplete, though the pain of the operation was slight. The loss of blood was not great. From ten o'clock, when she was etherized, till half past twelve o'clock, she remained stupid. Soon afterwards the pulse became thready, and there was sub-delirium. In about eight hours from the operation she died. At the autopsy, the firm, arborized brain was found infiltrated with serum both externally and internally. Sinuses full. The lungs show signs of old trouble, and are partially congested. Blood, fluid.

"12. Mendoza, Barcelona, Spain, 1847. A female, aged 60, underwent amputation of the leg, three days after suffering a comminuted fracture of the foot, which had been crushed by a wheel. Sulphuric ether was given, but it caused great uneasiness and cough; insensibility was, however, obtained at the end of a quarter of an hour, but it lasted only a few minutes. After attempts at re-etherization had been continued for half an hour, an hour was given her to recover her strength. Then she breathed it again, and was put to sleep in six minutes. She called out a little when the skin was cut, but afterwards remained silent. Although the pulse was full, the patient's exhaustion was manifest, and after the ligatures were applied she had a violent nervous attack, which was overcome by stimulants and the admission of fresh air. She then lay quiet, but exhausted, answering questions with a weak voice, though remembering nothing which had passed. This forgetfulness persisted, she became stupid, with a weak pulse, and heavy and stertorous breathing; her strength failed more and more, and she died fifteen hours after the amputation.

"19. M. Barriere, Lyons, France, 1852. A female, aged 55, in a weak and bad state of general health, underwent excision of the superior maxillary bone. Sulphuric ether was given from a sponge placed in a bladder. Death occurred during the operation. It was thought possible that it might have been due to the hemorrhage.

"20. Dr. G. de Oettingen, Dorpat, Russia, 1847. Constantly increasing anæmia, on account of a gangrenous ulceration of the leg, rendered amputation necessary in the case of an old man, seventy years of age. Sulphuric ether was administered from a common bottle, having an opening large enough to include the nose and mouth of the patient. The operation was completed, but the arteries were not tied when the indications of approaching death were noticed, which shortly occurred with symptoms of syncope. There was no hemorrhage. The autopsy gave no explanation of the death.

"23. Dr.———, New York, 1860. 'A patient with hernia had been laboring under symptoms of strangulation for some time, and was in a desperate condition. A cutting operation for his relief was resolved upon. He was fully anæsthetized with sulphuric ether, and suddenly, during the progress of the operation, showed symptoms of prostration and soon died.'

"Dr. W. H. Mussey, Cincinnati, O. A man, 50 years old, by the upsetting of his wagon, had been dragged thirty feet, and then rolled down an embankment eight feet high, when his wife, weighing 205 lbs., fell upon him. The patient, himself weighing 230 lbs., was occasionally intemperate, having had a debauch ten days previous to his accident, and had been quite sick in recovering from it. After his injury he had to be transported a mile in order to reach his house, and during the thirty hours ensuing he suffered intense pain, and took four grains of morphine in divided doses. In order to examine an injury which had befallen his hip, four ounces of sulphuric ether (it being the unanimous opinion of those present that his condition would not permit the use of chloroform) were administered with great care and precaution. 'At the time of seizing the limb for examination'—we quote from Dr. Mussey's own account—'a peculiar shortness of breath of an asthmatic character was noticed, and it was stated that he was subject to attacks of asthma. On observing this phenomenon, the use of ether was suspended and not resumed; the manipulation was, however, proceeded with, the patient screaming out and writhing with pain, and apparently perfectly conscious. Seeing that his lips were perfectly purplish and his breathing very short, I proceeded to administer for his relief. He called for water; a little was given him, and a little vinegar was put in it; finally, some whiskey was procured and administered in warm water. But little, however, was taken. The patient complained that he was suffocating, and the tongue was drawn out, though there was no lack of control of it, as he put it out to take stimulants. He was rolled upon his side; water was thrown in his face; first cold, then hot water applied to his forehead; the Marshall Hall method of artificial respiration, and the additional one of inflating the lungs from my own lungs, with forced expulsion of air, and flagellation of buttocks, were continued from fifteen to twenty minutes, when the patient was abandoned as dead.' At the autopsy, a space six inches in diameter in the right iliac and lumbar region was found blackened and purple with extravasated blood, and this extended anteriorly and superiorly upon the wall of the abdomen. It also extended through the entire pelvic cavity, and beneath the pelvic fascia there was a large deposit of blood. The source from which this emanated was a most extensive fracture (which in fact might be called comminuted) of the os innominatum, radiating in all directions from the acetabulum to the circumference of the bone. There was a large amount of adipose tissue upon and around the pericardium, and fatty deposits on the auricles of the heart, which had no structural disease other than an absence of the usual redness and firmness of the tissue. Nothing of importance presented itself in the rest of the examination.

"25. Dr.———, New York, 1860. 'A very large, old scrotal hernia had from some cause become irreducible. Inhalation of sulphuric ether was resorted to, and, while the patient was under its full influence, the hips being raised and the head allowed to be forcibly flexed upon the chest, the taxis was resorted to. The large mass of intestines very suddenly receded into the abdomen, and just at the moment the patient was noticed to be in a dying condition, from which he could not be recovered.

"27. Dr. J. Y. Bassett, Alabama, 1847. It was proposed to apply the actual cautery in a case of tetanus. Sulphuric ether was administered by a dentist. 'At this time the patient's pulse was good, and there were no signs of an immediate extinction of life. In one minute the patient was under its influence; in a quarter more he was dead—beyond all my efforts to produce artificial respiration or to restore life. All present thought he died from inhaling ether.

"30. Mass. General Hospital, 1855. A man aged 32, much addicted to drinking, sustained a compound fracture of the left leg, the tibia protruding an inch. Five days after the accident, delirium tremens appeared. On the second day of the attack, the patient's wife was told that he could not live. He was exhausted, bathed in perspiration, and had a feeble and rapid pulse. His delirium was such that the house pupil undertook to etherize him. He made the usual struggles, and had some opisthotonic spasms. The ether had been continued some minutes, when the breathing was noticed to be abdominal, although the pulse was quick and sufficiently strong. Within a quarter or half a minute, the pulse suddenly ceased; the lips were not blue, and the head and hands were warm. The patient was dead, and no efforts to restore life were of avail. At the autopsy, the sub-arachnoid fluid was found in larger amount than usual. Nothing remarkable about the brain. The heart was soft and flaccid, and contained some yellow, gelatinous coagula in the right side, and a small quantity of fluid blood in the left. There was no valvular disease. The liver was fatty. The kidneys and other organs were healthy."

It is quite impossible to read such cases as these without being impressed with the fact that ether is not altogether incapable of harm, even when cautiously administered. If the word chloroform were substituted for ether in these cases, most of the deaths would be placed to its account. There are few who will not now acknowledge the unquestionably and unavoidably fatal effects of ether in a given number of cases, however we may attempt to account for the death by other causes. Here are sudden deaths during the inhalation of ether without any autopsical appearances to explain the result. The refinement of speculation which would still refer the death to some undiscovered cause, rather than to the anæsthetic, would readily explain away all the alleged deaths from chloroform.

The committee require that death, to be chargeable to ether, shall occur during the anæsthetic state, and that it shall be inexplicable by any phenomena of disease or operation. This restriction excludes a number of deaths occurring several days after the use of the ether, and manifestly due to arachnitis excited by its inhalation. Three cases are reported where ether was inhaled several times for amusement, resulting in meningitis, and death. The committee charitably absolve "the anæsthetic from any responsibility," but significantly add: "It is not surprising that an intoxication, such as results from ether, should, especially in children, lead to a fatal issue in the manner described."

In conclusion, we must again commend the efforts of the committee to render their report complete. It is one of the most important medical papers which has appeared during the year, and we hope it will have a wide circulation in the profession. It will do good by opening the eyes of medical men to the dangers of the careless and indiscriminate use of anæsthetics. Of the danger of chloroform and of its fatal effects no intelligent practitioner has for a long time doubted; of the *not entire innocuousness* of ether no one who peruses this report will longer doubt. Every candid and thoughtful reader must conclude that anæsthetics of every description are powerful and dangerous agents, which are always to be used with great care and discretion.

THE WEEK.

Physicians to our public institutions, especially Dispensaries, are frequently shocked with the tales of crime and seduction which the recently arrived emigrants relate that they have witnessed on board of emigrant ships. In some instances these vessels are nothing less than floating brothels. Hundreds of young girls come to this country, unprotected, to meet friends who have gone before them; simple, unaccustomed to the world, and thrown for weeks directly into the toils of designing men, they readily fall into habits of the grossest and most unblushing licentiousness. Arriving in New York without means of support, they are immediately beset by "runners" for houses of low repute, and readily yield to the proffered rewards. The efficient agents in this system of female demoralization, and recruiting for the brothels of New York, are the crews of the emigrant vessels. It is stated on the best authority that seamen engage in these ships solely from the inducements for unchecked and unlimited licentiousness. The only remedy for this monstrous evil is in the selection of moral crews for our merchant service, and this can only be done effectually by concerted action among shipping merchants. A society has recently been formed in this city called "The American Shipmasters' Association," which is designed "to elevate the moral character and professional capacity of seamen, by the encouragement of worthy and well qualified officers." The Society was called into existence by the great annual loss of life and property in the American merchant service, owing to the unqualified seamen. Let them extend their inquiries, beyond the nautical qualifications of officers, to their moral characters, and they will strike a blow at one of the most disgraceful systems of crime ever organized.

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When religion seeks to advance the physical welfare of a people by giving its solemn sanction to the principles of sanitary science, it never fails of accomplishing its purpose. Men will listen to the voice of a religious monitor, and implicitly obey his instructions, when they would be indifferent if the same advice came from any other source, and even appealed to their reason and common sense. The example of the great lawgiver of the Jews is an illustration of what power religion has of enforcing its precepts. Many of the laws which were enacted with such solemnity for this nation, and religiously enjoined upon each family, were but simple expressions of great sanitary truths which are as much revered by that people to-day as when first promulgated. Clergymen rarely use the power they have to enforce the simple but highly important laws of correct living, partly doubtless through personal ignorance of what those laws are, and partly from a mistaken apprehension of the precise limits of their duties. We are glad to record an exception to this almost universal neglect of the physical interests of their parishioners by clergymen. Bishop Timon, of Buffalo, N. Y., a most intelligent and excellent Catholic bishop, has addressed a letter "to the honored and pious Christian women of the diocese," on the impropriety of low-necked dresses. He considers his subject both from a sanitary and a moral point of view, and derives from each sufficient reasons for enjoining upon them a change in this regard. The following is his emphatic exhortation:—

"But whatever may be the sentiment of the learned and the wise, on the danger of the low-necked dresses to the health; and whatever may be our wishes for the temporal happiness of the Christian women in our diocese; and whatever our zeal for the sacred mission, which women have to cultivate from earliest youth, and form, as only a mother can, the Christian life and spirit, in their sons and daughters; yet we dare not press upon them in the relations of society those rules of prudence, when they or their children prefer to wear fashionable, low-necked dresses in fashionable circles. But we most earnestly exhort all ladies, the very young as well as those of more mature age, not to appear in church, nor assist at Catholic sacred functions, nor present themselves for the reception of the sacraments, without having the neck, shoulders, and breast modestly covered. And we request all pastors of souls, and all religious ladies engaged in teaching, to use every possible exertion and influence to see that this advice be accepted in the spirit of charity, and of zeal for that which best pleases God, with which it is offered."

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An interesting fact relating to deaf mutes was recently noticed by Dr. Detmold, of this city. Being called to a child which a physician had pronounced idiotic, because it had not spoken, except the words "mamma" and "papa," on examination he discovered that it was a deaf mute. The following ingenious explanation of the speech in such cases is well worthy of attention:—

"The ordinary attempts to find out such cases are very apt to fail, and it requires some little ingenuity to prevent mistakes. The great difficulty seems to be that the children have *talked*, and I have never yet, among a large number that I have seen, met with a single case of deaf mutism that has not talked; and that is a point to which I wish to refer. If physicians will pay attention to it, and ask the mother of the deaf mute child, did the child talk? the mother will always say that her child has said some words, but they are invariably the same. All deaf mute children, I assert —I do not believe that there is an exception, at least I have seen none—have said 'mamma' and 'papa.' At first when I made this observation it somewhat staggered me. The parents and physicians thought that the child, having spoken, must talk, and that some late occurrence, for instance, scarlet fever, had interfered with the hearing. But upon reviewing the cases, and finding children all saying the same thing, I looked for another solution of the question, and I think I have found it. We know that speech may be carried on in two different ways; also one ordinary way in which children learn to speak is, if I may express myself so, by *experiment;* the child hears a sound and tries to imitate it, he keeps on until he has succeeded, and then he begins to speak. But there is another way that I might, as an antithesis, call *theoretical*, and that is best illustrated by the new method by which the deaf mutes are taught in Europe actually to articulate. On the continent there are now schools for deaf mutes, where they learn to speak in the following manner: Starting with the principle that speech is brought about by the action of certain muscles, the deaf mutes are taught to train their muscles by imitation, and speech, as a matter of course, will follow. The teacher, therefore, stands with his neck bare before the deaf mute, and shows the motions of the muscles of the throat and lips in such a way as that they can be imitated. It is an established fact that articulation is taught in the schools in Germany, and some years ago there were a number of teachers sent from here to Europe to investigate the matter, and although it had no great practical result, yet it had a scientific value in explaining why deaf mutes can talk. Now if you look to what they have said, you will find, as I have before remarked, that the same words are used in every case, and these are altogether labial sounds; sounds which are produced altogether by the motions which the child has seen and learned. 'Mamma' and 'papa' are the sounds which the mother takes special pains in the beginning to teach the child. The child, in its turn, being cut off from hearing, that most important means of communicating with the outer world, has a very acute observation, sees the mother making those motions, he imitates them, and finding the mother pleased with his efforts, at last is able to articulate the words. When, however, the mother ceases to teach the child in that way, and when it becomes more attentive to other motions, he forgets his first lessons. Let me add another remark, which is not without interest, and that is, I have found that in all languages, no matter whether civilized or savage, in all tribes, and in all nations, the relationship of parent to child is expressed by simple labial sounds similar to 'mamma' and 'papa.' There is no nation which expresses such a relationship by a guttural sound, or by any sound which is not easily imitated."

We are accustomed to regard Spain as very much behind other continental nations in its appreciation of medicine and medical men. And yet her laws are in many respects well worthy of our imitation. Take the following relating to pharmacy:—

"Spanish physicians and surgeons never dispense medicines or engage in pharmacy. Should, however, any person so licensed assume the latter calling, by existing laws affecting pharmaceans, he would *forfeit* his professional privileges, while those keeping shops for supplying drugs prescribed by the former classes—'no pueden ejercer simultaneamente la medicina ni la cirugia'—cannot exercise simultaneously medicine or surgery. On that point there exists no equivocation. Further, pharmaceans cannot sell a secret remedy, nor any special or specific preparation whose composition is unknown. Should it ever happen that the prescription of an unauthorized medical practitioner orders strong medicines, especially if poisonous, in extraordinary or unusual quantity, before compounding such doses the pharmacean must first communicate with the prescriber to verify his recipe, lest the party may have made a mistake."

POISONING.—Poisoning by laudanum is becoming rather fashionable in Melbourne. Within the last month five or six cases of poisoning have been admitted into the Hospital; several other cases have been recorded in different publications. It is a matter for serious consideration, whether druggists ought to be allowed to sell large quantities of laudanum or opium, or not, to any person who chooses in a fit of semi-insanity to walk in and ask for either. If the Legislature does not interfere, to prevent druggists selling large quantities of poison, people will soon begin to try their hands on each other.—*Med. Record.*

SURGEONS OF CALIFORNIA REGIMENTS.—DR. REID of Stockton; DRS. WILLIAMSON and MCNULTY of San Francisco.

REPORT OF A COMMITTEE
OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT,
ON THE ALLEGED DANGERS
WHICH ACCOMPANY THE
INHALATION OF THE VAPOR OF SULPHURIC ETHER.

ANY one who has observed the course of events, especially the tone of journals and the published statements of late surgical writers, as Erichsen, Druitt, Hamilton, and others, must have noticed a diminishing confidence in the safety of chloroform and an increased willingness to allow the greater security of ether. Various influences have, however, prevented the disuse of the former, even by many of those in whose hands accidents have occurred, and it still remains the anæsthetic most in vogue. When the subject of chloroform first came under discussion, its dangers were commented upon, and even then freely acknowledged. It had not been two months introduced when "a well developed girl of fifteen" died from its administration for the evulsion of a toe-nail, "the process of inhalation, operation, and death, not having occupied more than five minutes."* Since that time deaths from its use have repeatedly occurred. On the other hand, fatal results from ether, although still figuring in the statistics of mortality from anæsthetics, are everywhere admitted to be very infrequent. Indeed, the opinion has been expressed by various authorities, both in America and Europe, that a death really attributable to the inhalation of sulphuric ether is yet to be reported. The correctness of this opinion has, however, been repeatedly denied, and the strong conviction of the absolute safety of this agent, which exists in some localities in this country, is thought to have its foundation rather in the desire that the fact might be established than in the proof that it was so. Of course no one intends to say that a person cannot be killed by ether. The inhalation of its vapor, without a sufficient admixture of oxygen, destroys life by asphyxia. This may happen, and unfortunately has happened, but such an event cannot be laid to the anæsthetic, since, in such a case, it is the method of administration, and in no sense the ether, which causes the fatal result. It is the purpose of this report to solve the doubt just implied with regard to the absolute safety of sulphuric ether, and to investigate the dangers of its use as compared with chloroform. In pursuance of this object, therefore, we propose, in the first place, to consider what conditions and precautions are necessary in bringing about a state of insensibility by its use, and what phenomena of etherization have an apparent or real danger.

I. The safe inhalation of ether requires proper attention —1st, to the quality of the article used; 2d, to the method of administration; 3d, to the symptoms which present themselves while the patient is under its influence.

1st. *Quality of Ether.*—Ether for inhalation should be of unquestionable purity. A large amount of inferior ether is sold which cannot readily be distinguished from that which is pure, except by its effects, although an expert, familiar with its properties, may infer something from the odor and other sensible qualities. The inferiority may be due to oxydation from bad corking, the presence of alcohol, sulphurous acid which has not been removed by thorough washing, and volatile oils. Either of these impurities may give rise to a tedious and imperfect inhalation, and the latter of them, by irritating the bronchial mucous membrane, to such coughing, struggles, and resistance, that the patient is finally etherized in a distressing and unsatisfactory manner. Accidents of this kind lead to a disparagement of the value and practical usefulness of ether. It is therefore an advantage for the surgeon to procure his own ether, or to use from an "original package," of the character of which he has already assured himself. There are two brands of ether in common use in this country, viz. that manufactured by Powers and Weightman of Philadelphia, and that by Dr. Squibb, of Brooklyn, N.Y. These are uniformly of excellent quality. The latter is remarkably anhydrous, but possesses an odor more harsh, disagreeable, and intensely etherlike than the former, and, in the opinion of those who have used it extensively, produces more choking during inhalation. This may be remedied to a certain extent by moistening the sponge from which it is given in water, enough of which will perhaps be taken up by the ether to diminish its unpleasant effects.

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* Medical Gazette, Feb. 11, 1848, p. 255.

Ether may be made purer by simple agitation in lime-water, allowing the water to settle, and then decanting; and this washing is practically, and for general application, as good a method of purification as can be adopted without re-distillation.

2d. *Method of Administration.*—Ether should never be given from any inhaling apparatus. The best medium of its administration is a bell-shaped sponge, large enough to cover in the nose, mouth, and chin; but it is difficult to find one of sufficient size and close enough in texture, or without such numerous apertures at the root as to admit too freely the atmospheric air. A sponge of this sort, moreover, being as expensive as rare, is seldom used outside of hospitals. A stiff towel, properly folded, may be substituted, and has the advantage of being always at hand; as it may be left behind, the surgeon does not carry away with him the annoying odor of an impregnated sponge. It is desirable that the towel should be a new one, and of pretty good size. It is to be taken just as it comes from the laundry, and not unfolded further than to display it in the dimensions of about ten inches by five; by folding down two of the corners in such a way that they shall lap over each other a little, and securing them by stout pins, a cone will be made which fits the face admirably. The thick layers of towelling will hold sufficient ether, and its texture prevent a too free dilution of the anæsthetic by the atmospheric air, provided the apex and seam of the cone are carefully and tightly closed, either by pins or the fingers. As the cone becomes collapsed by saturation, it should from time to time be opened, and kept in shape by distending it with the hand. Unless these details are attended to, and especially the closure of the apex of the cone, the induction of anæsthesia will be uncertain and protracted. In anything so porous as a towel or sponge, the difficulty is to exclude enough air; for while its adequate admission to the lungs during etherization is essential to the life of the patient, its too free entrance not only delays anæsthesia, but induces a condition of excitement, both mental and physical. The importance of excluding the air, as above stated, is a point not generally appreciated, but the necessity of it has long been known to those most accustomed to the use of ether, as shown by the "chemise" with which, in hospital practice, a too porous sponge is often covered to expedite the etherization of a rebellious patient. Ether should be poured lavishly on the towel or sponge, an ounce or two at a time, especially at the commencement of inhalation. Although it may be wasted, too much, so far as safety is concerned, cannot be used. A small quantity poured on hesitatingly and timidly, as is sometimes done, has the same effect as a too free dilution of the vapor with air, producing simply intoxication and its accompanying excitement without anæsthesia; whereas a large amount, though the cough and choking sensation which the greater volume of vapour produces may cause the patient to resist and struggle, is certain to bring about a satisfactory condition of insensibility.

3d. *Phenomena of Etherization.*—A strong, full-blooded man is pretty sure to resist the approaches of anæsthesia under any circumstances. This may sometimes be overcome by warning him beforehand of such a possibility, and inducing him to resolve not to struggle; the last impression on his mind influences him even in his stupor. The same thing is liable also to happen with almost all patients just before complete anæsthesia takes place, but the ether rarely requires to be suspended. Occasionally the respiration becomes embarrassed during the period of excitement, partly from the struggle itself, and partly perhaps from the increased flow of saliva, which is a common phenomenon of etherization, or from the position of the tongue or head of the patient, and a condition may sometimes show itself characterized by lividity, rigidity, and convulsive motions of the extremities. These phenomena, it is an observation of Dr. H. J. Bigelow, of this city,[*] are in reality the tetanic symptoms which, Dr. Brown-Sequard has shown, precede the approach of asphyxia. Although alarming to the inexperienced, the state is in fact devoid of danger, provided the ether be momentarily suspended; this being done, the refusal to breathe soon gives place to a long-drawn inspiration, and in most instances complete insensibility immediately ensues. In such a case it is interesting to observe how readily the spasm yields, and how complete is the muscular relaxation which follows the free respiration of air unmixed with ether. It should therefore be borne in mind, that when there is muscular rigidity with lividity, the suspension of etherization will transform this into the relaxation of anæsthesia. Persons of intemperate habits succumb to ether slowly, and with greater reluctance and more opposition than persons unused to intoxication. The pulse should be watched by a competent person from the outset, and its failure, either in strength or frequency, lead to a more cautious use of the ether. It must, however, be remembered, that in experiments with anæsthetics upon animals, the heart has been found to be the *ultimum moriens*;[†] the respiratory movements, therefore, should not be forgotten or neglected, but any slowness or irregularity in the performance should at once receive attention. Attention has been drawn by Dr. H. J. Bigelow to the distinction between the effects of anæsthesia upon the pulse of the healthy subject suddenly reduced by accident, and a similar and even stronger pulse in a person exhausted by long and grave disease. In the former case the vitality is unimpaired, and the pulse, even when hardly perceptible, rises with anæsthesia. Ether, therefore, is not to be withheld from a patient to be operated on, even in a state of collapse after severe accident, but great caution is demanded in its use with patients who are near death from chronic and exhausting disease, and who require operations[‡] The best test of complete etherization is the snoring of the patient; and no operation, unless slight, should be undertaken until this symptom presents itself. The relaxation of the muscles of the extremities may occur without insensibility. The important distinction between *snoring* and *stertor* is, however, to be borne in mind. Whilst the former is caused only by the relaxation of the muscles of the palate, the latter arises from spasm of the vocal cords and partial closure of the rima glottidis, and thus becomes the immediate forerunner of the train of symptoms already referred to as indicative of partial asphyxia. Stertorous respiration demands, therefore, a brief suspension of inhalation; one or two inspirations of fresh air will, as already mentioned, almost instantly dispel the symptom. Ether may be administered to persons of all ages, from the new-born infant to the octogenarian. There is, however, a condition prone to manifest itself with children, especially those who are weak, strumous, or overgrown, which is due to its cumulative properties. It may show itself after almost any degree of etherization, and is characterized by a feeble pulse and slow respiration, not passing off with the readiness usually marking the phenomena of etherization. With young persons a cautious inhalation of five minutes will often induce an anæsthesia of half an hour, an effect wholly out of proportion to what the same amount of ether would produce in an adult. This state is not a dangerous one, and only requires time to dissipate its symptoms. Compression of the chest will expel the fumes of ether being eliminated from the pulmonary surface, and admit the entrance of a fresh supply of oxygen to stimulate the circulation. The inhalation should therefore be suspended at short intervals with children, and but little ether given at a time. It should also undoubtedly be used with great caution with persons, past the middle age of life, of such a general obesity or constitutional condition as may lead to the supposition of a fatty degeneration of the heart. In none of the alleged deaths from ether is there any mention, however, of valvular disease of the heart being found. Of this, then, and of any bad effect upon pulmonary affections, there need be no fear, for we see it constantly administered without detriment to persons more or less advanced in phthisis, for the common operation of fistula in ano. Its subsequent effects are rarely disagreeable. The nausea and vomiting which follow the use of any anæsthetic may be prevented or diminished by giving it upon an empty stomach. Faintness, although a rare event, is occasionally noticed, and demands the ordinary treatment by stimulants. Headache sometimes remains for a few hours, but seldom persists into the following day. We now and then hear of delirium, debility, and the non-return of a full use of the mental faculties, as temporary accidents from the use of ether.[*] Such occurrences must be of extreme rarity, and probably find their explanation as much in the idiosyncrasies of patients as in the effects of the anæsthetic.

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[*] Unpublished Records of the Boston Society for Med. Improvement.

[†] Du rôle de l'alcool et des anæthesiques dans l'organisme, Lallemand, Perrin et Duroy, Paris, 1860, p. 898.

[‡] Unpublished Records of the Boston Society for Med. Improvement.

II. Having thus detailed what we conceive to be the conditions of its successful and safe administration, we undertake, in the second place, to prove that, these conditions being fulfilled, sulphuric ether is, of all anæsthetic agents, alone worthy of unlimited confidence. Confirmation of this assertion is to be found in what we know of the use of ether in other places. It is true that thus far this has been limited to a few localities, but wherever it has been adopted the confidence and freedom with which it is administered are worthy of notice. In 1857, it was stated that for about eight years ether alone had been used in the civil or hospital practice of Lyons, in France, and that during that time the necrology of anæsthetics, so far at least as that city was concerned, had remained closed.[†] And here, in Boston, where more ether has probably been inhaled during the last fifteen years than in any other place in the world, from the time when Dr. George Hayward performed the first capital operation under its influence (Nov. 7, 1846) down to the present day, no fatal result has ever occurred, or been heard of in the vicinity, though repeated deaths have happened from chloroform during the same period. But to sustain the above conclusion with regard to the absolute safety of sulphuric ether, your Committee place their chief reliance upon the histories of the recorded fatal cases thought to have been caused more or less by its inhalation, and upon the result of their own efforts to obtain information of all others of the kind known to the profession anywhere. With unequalled facilities to examine the literature of the subject under discussion, with all the chief foreign and American Journals at hand, and the results of a most extensive distribution of circulars before us, no case of which we have knowledge can be cited as unquestionably and unavoidably fatal from the breathing of pure sulphuric ether.[‡]

The following two conditions must be considered essential to any case of death fairly attributable to the inhalation of an anæsthetic agent:—1st, That the event should occur while the patient is actually in an anæsthetic state. 2d, That the circumstances of its occurrence should be inexplicable by any phenomena of disease or operation. Such a death should be unavoidable by any precautions which might be adopted were the patient to be again rendered insensible under similar circumstances. It must consequently be sudden and unexpected in manifesting its symptoms, as well as rapid in its progress to a termination. The unmistakable deaths following the use of chloroform have usually been almost instantaneous; out of twenty-seven which occurred in ten minutes, fifteen took place in less than two minutes.[*] No conclusive light can be thrown on the subject by a post-mortem examination; it can only demonstrate a cause exculpating the anæsthetic—there being no pathognomonic signs of death from the use of these agents. It is clearly unreasonable, therefore, to attribute to anæsthetics deaths happening long after patients have recovered from their immediate and specific influence. A man is etherized for lithotrity, and dies of pneumonia a week later; or, a female, anæmic and feeble, suffering from the constitutional effects of a malignant tumor of rapid and large growth, inhales chloroform for the bloody or tedious operation by which it is to be removed, and dies twenty-eight hours afterwards without rallying. Events of this description are not so infrequent where no anæsthetic has been used as to require any other explanation than such as may be found in the operation or disease itself, and are obviously liable to occur from accidental causes under any circumstances. Yet this is the character of a large proportion of the facts cited by writers as evidence to prove the occasional occurrence of fatal results from the inhalation of ether. Of the whole number of alleged deaths from sulphuric ether (forty-one) which has been collected by your Committee, sixteen survived the inhalation from three to sixteen days, and eight from three to fifteen hours. In all of these death occurred after the peculiar primary effects of its use had subsided, from a secondary set of symptoms, which were either simply coincident or else such as are well known frequently to terminate in death when no anæsthetic has been used, and which, moreover, never show themselves in cases of inhalation for slight and trivial operations where the primary effects of ether have been just as well marked as in the severer operations after which they were alone noticed. Of the six cases in which death occurred in less than twenty-four hours, three, viz. Nos, 3, 8, and 12, have been almost universally set aside as inconclusive; two, Nos. 15 and 21, are manifestly unattributable to the ether. Of the sixth, No. 40, the details are very meagre, but that the death had any connexion with the anæsthetic, is at least improbable. In the remaining seventeen cases where death was immediate, or nearly so, the connexion between the result and the inhalation is either problematical or else manifestly absurd and unfounded, except in four instances, viz. cases 1, 25, 34, and 39, where it was due to asphyxia, brought about by wholly avoidable causes. The administration of an anæsthetic *in articulo mortis*, as for example in an operation for strangulated hernia, may sometimes merge the sleep which it produces into the sleep of death, without the termination of the case being hastened by, or attributable to, the inhalation. Patients die from *croup* during an attempt to save life by tracheotomy, and may equally succumb to tetanus or delirium tremens during the inhalation of ether or chloroform. Cases 23, 27, 28, and 30, must be considered as instances belonging to such a category. Of the seven cases in which the period when death took place is not mentioned, there is no one where the evidence does not admit of strong doubt as to the connexion between the result and its cause, or else is insufficient to produce conviction. The remaining cases of the table not yet accounted for, viz. Nos. 16, 19, 20, 24, and 29, are no better able to stand the test of examination. The character and circumstances of the operation in the first three certainly absolve the ether. In the fourth (No. 24), the nature of the injury as shown by the autopsy, and the condition of the patient at the time of inhalation—it being such as in the unanimous opinion of those present would not permit the use of chloroform, together with the fact that he never was fairly etherized—point to some other cause than the anæsthetic to account for the fatal result. The history of, and the statements connected with, the remaining case (No. 29), equally exclude that from being relied on as an instance of death from ether. The statements of any author, however distinguished in position, not accompanied by proof in the form of *pièces justificatives*, must remain of no value in face of the direct evidence of your Committee, that their careful search of journals and monographs furnishes not a single conclusive case of death from the proper inhalation of pure sulphuric ether.

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[*] Lente, N. Y. Journ. of Med., Nov., 1856. Clark, do. do., Sept., 1856. Hooker, Boston Med. and Surg. Journ., Vol. 58, p. 231. Humphry, Provincial Med. and Surg. Journ., Aug. 9, 1848.

[†] Revue Médicale, 1857, p. 602.

[‡] In an appendix to this report, every instance of alleged death, or allusion to such, caused by any form of ether, which we have been able to find, is given with all the important facts of its occurrence, or at least so far as they could be obtained. If any other cases, conclusive or not, have occurred, this Committee is not responsible for their ignorance of them, as they have used every means in their power by notices in newspapers and Medical Journals, and by a correspondence scattered over the United States (long prior to the interruption of mail communication by the rebellion), British Possessions, West Indies, England, and Europe, to collect all existing facts bearing on the subjects of their investigations.

[*] British Med. Journal, Feb. 21, 1857.

III. In contrast with the foregoing evidence, how striking is the admission of the staunchest partisans of chloroform, that no care on the part of the administrator, nor intrinsic chemical perfection, will insure the safety of the person breathing its vapor! Neither the skill of a Dr. Snow, nor the laboratory of Duncan, Flockhart & Co., appears to exempt those who inhale chloroform from the fatal calamities which sometimes ensue wherever it has been used. In 1857, in a discussion before the Academy of Medicine, M. Ricord spoke of the use of chloroform as "an accident which complicated an operation;" and in 1859, the President of the Paris Société de Chirurgie, M. Hervez de Chegoin, seriously proposed the question, "Whether its use had not better be actually suspended until some method of using it with constant security had been discovered, or, if it is to remain of so uncertain safety, even renounced altogether?"[*] In 1856, Mr. Erichsen, of London, in a letter to Dr. S. D. Townsend, of this city, said, that "when a patient was fully under the influence of chloroform he was on the verge of death."[†] The epithet "*fleau chloroformique*" is, therefore, no undeserved one, for in any man's hands chloroform may indeed become a scourge whose blows shall fall so suddenly and mysteriously, that before the surgeon's knife is taken up, the patient's life may have passed away beyond resuscitation. No such impressions have ever prevailed with regard to sulphuric ether. No one can die from it as he may die from chloroform. Dr. J. C. Dalton, in a letter to your Committee, speaking of the use of chloroform in the vivisection of animals, says, "I am convinced from my experience, that no caution will prevent its producing a fatal effect, and no care will enable the operator to see when the danger is threatened." On the other hand, with regard to ether, he states, "I never feel any anxiety as to the safety of an animal under etherization, provided I can myself watch the state of the pulse and respiration, or can rely upon the aid of a competent assistant for that purpose. So far as my observation goes, the dangerous symptoms in the case of ether can always be recognised, with ordinary care, in sufficient time to prevent a fatal result." Dr. John Snow declares that "he holds it almost impossible that a death from ether can occur in the hands of a medical man who is applying it with ordinary intelligence and attention.[‡]

The more agreeable *odor*, the more *rapid result*, and the smaller *bulk*, are the only compensations offered as an offset to the suspended sword which thus hangs over the surgeon whenever he invokes the aid of chloroform. The first of these advantages seems too unimportant to be serious; nor are all people of one opinion as to the more agreeable smell of chloroform. M. Roux talks of its "nauseating and sickishly sweet odor," as being more painful to inhale than that of ether;[†] and M. Sédillot says, that of patients submitted by him "sometimes to the use of ether and sometimes to that of chloroform, all have preferred ether."[‡] Dr. Snow esteems the odor of, and the sensations produced by, ether as much more pleasurable than those of chloroform.[§] Then, too, as to rapid action, a patient may be put by ether into a thorough anæsthetic condition for the performance of a by no means short or trivial operation in one minute and a third.[*] Chloroform can hardly do more than that. Is the rapid production of anæsthesia, however, a desirable thing? It is an assertion based upon statistics that the early stage of chloroformization is the most dangerous.[†] The agitation and excitement of patients during the first moments of inhalation may explain this, as the rapidity and intensity of anæsthesia are in proportion to the activity of respiration and circulation. Such being the case, a gentler and slower anæsthetic than chloroform ought to carry the patient more safely over this dangerous period, by allowing the etherized blood gradually to penetrate the remotest parts of the system, and thus avoid the prostration of a sudden and violent impression upon the nervous centres. The necessary duration of the anæsthetic condition, when gradually induced, must for the same reason be more satisfactorily ensured. A rapid anæsthesia, although complete, is apt to be of very short duration, and the patient may recover his sensibility as suddenly as he lost it. This does not occur so frequently when the anæsthetic has taken effect in a slower manner, and may be explained by supposing that a volume of the blood first charged in the lungs passes to the brain and narcotizes the patient, and that the blood which remains in the extremities, not yet touched by the vapor, will, if the process be arrested, in its turn flow through the brain and at once revive him. On the other hand, a more protracted inhalation, such as is usually the case with ether, ensures the gradual saturation of the whole circulation. Here, too, is an additional illustration of the important statement before made, that unless an operation is to be short, the surgeon should not be content with the appearance of the first symptoms of insensibility, but push the anæsthesia till the patient snores.

The advantages of chloroform in respect to portability are of little consequence in civil practice. But when an agent so much more compact than ether can be used in military hospitals and on the battle-field, the necessity of reducing baggage to its minimum demands, it has been alleged, that the less bulky anæsthetic be preferred, and this argument is usually strengthened by a reference to the results of its use in the Crimea, viz. two deaths in 30,000 cases, one in the French and one in the English army. These statistics, apparently so conclusive, will not, as your Committee believe, stand the test of examination. How was it possible to obtain accurate information from every battery, rifle pit, or trench, where chloroform was given? What surgeon would not, under the circumstances in which it must constantly have been administered, be liable often to attribute to the effects of an injury fatal results really due to the anæsthetic—especially if it is true, as Dr. Snow states in a communication to Mr. Guthrie,[‡] that to "take 10 minims of chloroform into the lungs when insensibility is almost complete, must be attended with danger." A perusal of the letter of Dr. J. Hall, Inspector General of Hospitals in the Crimea, to the Director General at London,[§] or of a paper by Dr. Mouat, Deputy Inspector General in the English Army, read by him in the Crimea to the Crimean Medical Society,[‖] will persuade the reader that more than one death from chloroform occurred during the war, amongst the British troops. Such certainly is that gentleman's impressions, and it does not appear to have been either opposed or contradicted by the other members of the Crimean Society. Dr. Lente says that the assertion of Baudens, that only one fatal case happened amongst the French from chloroform, is denied by other surgeons, who themselves saw deaths occur from its use.[¶] But whether this is true or not, that 30,000 soldiers should escape the dangers of chloroform, is no argument in its favor. It is well known that a vast number of missiles are thrown in battle without touching a single person, yet no one would pre-

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[*] Seance du Mai, 1859.

[†] See Record of the Boston Society for Med. Improvement, Vol. 3, p. 84.

[‡] On Chloroform and other Anæsthetics, their Action and Administration, London, 1858, p. 362.

[§] L'Union Médicale, Jan'y 4, 1848.

[‖] De l'Insensibilité produit par le Chloroforme et par l'Ether, et des Operations sans douleur, Paris, 1848. p. 95.

[¶] Loc. cit., p. 357.

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[*] British and Foreign Med. Chir. Review, October, 1859, p. 352.

[†] Med. Times and Gazette, May 12, 1860.

[‡] Commentaries, London, 1855, p. 39.

[§] Med. and Surg. History of the British Army which served in Turkey and the Crimea during the War against Russia. "Blue Book," p. 269.

[‖] Med. Times and Gazette, Aug. 30, 1856.

[¶] American Journal of Medical Sciences, April, 1861.

tend that this fact diminishes in the slightest degree the danger in the flight of a solitary bullet. The position of chloroform is precisely identical. The amount of ether required for army use, if properly administered and economized, is not very great. The quantity necessary for a regiment, especially one with easy access to its supplies, cannot add much encumbrance to the stores of the hospital department. At all events, it might be used to a certain extent, and the soldier's life in a degree secured against the treachery of one foe not less dangerous than the bullets of the enemy. The objection to ether on account of its inflammability does not apply with any more force to its use in armies than in private practice, and ordinary precautions will provide against accident from this cause. The more trivial the operation for which chloroform is inhaled, the more care should be taken in its use, fully two thirds of the deaths from its effects having occurred during the performance of minor operations.* The very opposite of this is true of ether. Only after long, protracted inhalation, during operations accompanied by great loss of blood, or involving great prostration of the general system, can any possible anxiety be felt. The friends of chloroform admit that "over 150 deaths" have already occurred from its use.† This, it is urged, is only about 11¼ per year since its first application in 1848. Had as many fatal cases happened in that period from opium, aconite, arsenic, strychnia, or other poisonous drugs, administered by regular physicians, would the use of such agents still be authorized? And how much stronger would the case be, did they produce death in the unexpected and sudden manner in which chloroform strikes its victims! The objections to chloroform apply with equal force to chloric ether, which is chloroform diluted with alcohol, to amylene, and to the mixture of sulphuric ether and chloroform, in whatever proportion. The dangers of this last are well shown in a case reported in the Appendix, where a boy 5 years of age died within three or four minutes after breathing a mixture of four parts of ether and one of chloroform. The addition of chloroform to ether being unnecessary, only renders dangerous an anæsthetic which is otherwise safe, and is liable to lead to a carelessness in its administration which would not occur with chloroform, and might prove as dangerous as when that anæsthetic is alone used in an unadulterated state.‡ Of the new agent, "kerosolene," recently discovered in this city, the remarkable physical properties of which are so attractive, sufficient experience has not yet been had to authorize an opinion upon its future value.

Of the action of anæsthetics on the system, we have but an imperfect and inconclusive knowledge. The following statements are cited from the work of Lallemand, Perrin and Duroy, already referred to. This recent and elaborate treatise depends for its facts upon numerous experiments on animals, and upon such carefully conducted researches as entitle it to confidence. 1st. Anæsthetics are neither transformed nor destroyed in the system, but are rapidly eliminated from it, chiefly by the lungs, and to a limited extent by the cutaneous surface. Chloroform and amylene being insoluble in water, no traces of them are ever found in the urine. Sulphuric ether being more soluble, a small quantity of this may be detected by re-agents in the renal secretion. 2d. The blood and the organs of animals dead from *etherism* (the name given to this special intoxication by the above-named authors) contain the anæsthetic agent employed, the presence of which is easily determined by special chemical research; and the following figures show in what proportion the principal viscera contain the anæsthetic, in reference, for each of the agents employed, to the quantity found in the blood.

SOURCE OF ANALYSIS.	CHLOROFORM.	SULPH. ETHER.	AMYLENE.
Blood,	1.00	1.00	1.00
Cerebral substance,	3.92	3.25	2.06
Liver,	2.08	2.25	1.00
Muscular tissue,	0.16	0.25	Traces.

From this it appears that anæsthetics accumulate in the cerebro-spinal system. 3d. It is not easy to explain the deaths from chloroform and amylene, or from ether (as sometimes seen in the lower animals), but it would seem probable, both from the phenomena which they present and the experiments which have been made, that they are the consequence of an abolition of the functions of the nervous system, and not of asphyxia.

The general conclusions which have been arrived at by your Committee may be summed up as follows:—1st. The ultimate effects of all anæsthetics show that they are depressing agents. This is indicated both by their symptoms and by the results of experiments. No anæsthetic should therefore be used carelessly, nor can it be administered without risk by an incompetent person. 2d. It is now widely conceded, both in this country and in Europe, that sulphuric ether is safer than any other anæsthetic, and this conviction is gradually gaining ground. 3d. Proper precautions being taken, sulphuric ether will produce entire insensibility in all cases, and no anæsthetic requires so few precautions in its use. 4th. There is no recorded case of death, known to the Committee, attributed to sulphuric ether, which cannot be explained on some other ground equally plausible, or in which, if it were possible to repeat the experiment, insensibility could not have been produced and death avoided. This cannot be said of chloroform. 5th. In view of all these facts, the use of ether in armies, to the extent which its bulk will permit, ought to be obligatory, at least in a moral point of view. 6th. The advantages of chloroform are exclusively those of convenience. Its dangers are not averted by its admixture with sulphuric ether in any proportions. The combination of these two agents cannot be too strongly denounced as a treacherous and dangerous compound. Chloric ether, being a solution of chloroform in alcohol, merits the same condemnation.

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GEO. HAYWARD, J. BAXTER UPHAM,
S. H. TOWNSEND,

Committee.

The foregoing report was accepted, and its conclusions adopted by the Society.

FRANCIS MINOT, *Secretary.*

Dr. C. T. Jackson, one of the Committee, objects and excepts to the clause in this report in which "all mixtures of ether and chloroform" are denounced; viz. to the words, "the dangers of chloroform are not averted by admixture with sulphuric ether," and to the terms, "treacherous and dangerous compound" of chloroform and ether. He believes that a mixture of four measures of ether and one measure of chloroform may be employed without danger, or with very little danger, and that the risks from chloroform are diminished more than four fifths by this combination. He believes it to be necessary to have an anæsthetic agent of less bulk than ether, and not so dangerous as chloroform, for army uses, and is satisfied that this mixture, which he has employed and prescribed, completely answers the purposes required.

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* British Med. Journal, Feb. 21, 1857. Med. Times and Gazette, May 12, 1860.

† Dublin Med. Press, June 5, 1861.

‡ It has been said that a mixture of ether and chloroform was employed with great success by the French in the Crimean war. There is no published documentary evidence to prove that such a combination was adopted No mention is made of it by the Inspector-General at the head of the French Medical Service in the Crimea. On the contrary, a correspondence between that officer and the General-in-chief leaves no possible doubt as to the exclusive use of chloroform; his general remarks, also, render it certain that no other anæsthetic was substituted at any time during the war. (Rélation Medico-Chirurgicale de la Campagne d'Orient. Paris, 1857. Pp. 123, 160, and 456) In none of the Journals of the period, nor in the English Government Report of the Medical History of the War, is there any statement leading to the inference that a mixture of ether and chloroform was used by either army during that campaign, or anything which can authorize the supposition that the word "chloroform" is used as synonymous with "anæsthetic," and therefore includes in its meaning the combination said to have been employed. A point so important could not fail to be set forth in distinct terms in such careful reports as were made after the Crimean war.

TABLE OF ALLEGED DEATHS FROM THE INHALATION OF ETHER.

No.	Operator or Reporter.	Date.	Locality.	Sex.	Age.	Operation, or purpose for which it was administered.	Period after which Death occurred.	Probable Cause of Death.
1	Figuier.	1847	Auxerre, France.	M.	55	Cancer of breast.	During op.	Asphyxia.
2	Robbs.	1847	England.	F.	21	Tumor of thigh.	40 hours.	Shock and exhaustion.
3	Eastment.	1847	“	M.	11	Amputation of thigh.	3 hours.	Shock of accident and operation.
4	Nunn.	1847	“	M.	52	Lithotomy.	50 hours.	Shock and exhaustion.
5	Taylor.	——	“	—	—	———	——	Case similar to preceding.
6	Robinson.	1847	“	M.	70	Amputation.	4 days.	Shock, exhaustion, age.
7	Kopezky.	1847	Vienna, Austria.	M.	—	Amputation of thigh.	6 days.	Pneumonia.
8	Roel.	1847	Madrid, Spain.	F.	50	Cancer of breast.	8 hours.	Shock and state of general health.
9	Kopezky.	1847	Vienna, Austria.	F.	—	Amputation of arm.	5 days.	Pleuritis.
10	Jobert.	1847	Paris, France.	F.	33	Cancer of breast.	16 days.	Erysipelas and bronchitis.
11	Jobert.	1847	“ “	F.	47	Amputation of thigh.	15 days.	
12	Mendoza.	1847	Barcelona, Spain.	F.	60	Amputation of leg.	15 hours.	Shock of accident and operation.
13	Schuh.	1847	Vienna, Austria.	F.	26	Amputation of thigh.	4 days.	Pyæmia.
14	Kopezky.	1847	“ “	M.	—	Hæmatocele.	13 days.	“
15	R. D. Mussey.	1847	New Hamp., U. S.	M.	—	Lithotomy.	5 to 6 hours.	Shock.
16	Johnson.	1853	Virginia, U. S.	F.	—	Exsect. of entire lower jaw	During op.	Shock, hæmorrhage, &c.
17	Forbes.	1847	England.	Boy.	—	Lithotomy.	Many days.	Intense local inflammation.
18	Humphry.	1848	“	M.	—	Amputation of arm.	3 days.	
19	Barrière.	1852	Lyons, France.	F.	55	Excision sup. maxilla.	During op.	
20	De Oettingen.	1847	Dorpat, Russia.	M.	70	Amputation of thigh.	“	Shock.
21	Lewis.	1847	Boston, U. S.	M.	—	Amp. at shoulder-joint.	12 hours.	Shock of accident and operation.
22	Richet.	1847	Paris, France.	M.	43	“ “ “	11 days.	Capillary bronchitis.
23	———	1860	New York, U. S.	—	—	Op. strang. hernia.	——	
24	W. H. Mussey.	1860	Ohio, U. S.	M.	50	Surgical examination.	15 to 20 min.	Comm. frac. os inn. perhaps fat. deg. of heart.
25	———	1860	New York, U. S.	—	—	“ “	During inhal.	Asphyxia?
26	Rigaud.	1847	Paris, France.	M.	63	“ “	4 days.	Bronchitis.
27	Bassett.	1847	Alabama, U. S.	—	—	Actual cauterization.	During inhal.	Tetanus.
28	Roux.	1847	Paris, France.	—	—	Tetanus.	——	“
29	Clark.	1859	New York, U. S.	F.	27	Intense headache.	During inhal.	Disease of the brain.
30	———	1855	Boston, U. S.	M.	32	Delirium tremens.	“	Delirium tremens.
31	Piedagnel.	1847	Paris, France.	M.	—	———	15 days.	Arachnitis.
32	Eve.	1849	Kentucky, U. S.	M.	—	Exhilarating effects.	4 days.	Symptoms of meningitis.
33	Miller.	——	“ “	F.	15	“ “	12 days.	
34	Payne.	1851	London, Eng.	M.	—	As an anodyne.	——	Asphyxia.
35	Velpeau.	1847	Paris, France.	F.	60	Tumor of breast.	3 days.	Acute pulmonary disease.
36	Roux.	1847	“ “	—	—	Opening of an abscess.	3 days.	Exhaustion.
37	Roux.	1848	“ “	M.	82	Lithotomy.	——	
38	Bergson.	1847	Berlin, Prussia.	M.	—	Lithotrity.	——	
39	Velpeau.	1847	Paris, France.	—	—	Excision of tonsils.	——	Asphyxia.
40	Scoutetten.	——	Metz, Paris.	M.	50	———	4 hours.	
41	Giraldes.	1860	———	—	—	———	——	

ETHER AND CHLOROFORM COMBINED.

1	Crockett	1857	Virginia, U. S.	M.	5	Fatty tumor.	At end of op.	

ETHER AND SUBSEQUENTLY CHLOROFORM.

1	March.	1854	Albany, U. S.	F.	18	Tumor of neck.	2 hours.	
2	Vallette.	1858	Lyons, France.	—	—	———	During inhal.	

CHLORIC ETHER.

1	———	1853	Lynn, U. S.	F.	—	Extraction of tooth.	During inhal.	
2	Haynes.	1852	N. Hamps., U. S.	F.	—	Tumor of thigh.	15 to 20 min.	
3	Ingalls.	1852	Chelsea, U. S.	M.	20	Evulsion of toe-nail.	During inhal.	

CHLORIC ETHER AND CHLOROFORM.

1	Folitz.	1852	East Boston, U. S.					

RESUMÉ OF 41 CASES OF ALLEGED DEATH FROM SULPHURIC ETHER.

In 6 cases death occurred in from 11 to 16 days.
In 9 “ “ “ “ 3 to 6 days.
In 1 “ “ “ after “many days.”
In 2 “ “ “ from 40 to 50 hours.
In 3 “ “ “ from 8 to 15 hours.

In 3 cases death occurred in from 3 to 6 hours.
In 1 “ “ “ from 15 to 20 minutes.
In 4 “ “ “ during the operation.
In 4 “ “ “ “ inhalation.
In 8 “ the time which elapsed is not stated.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture V.—Part II.

Increased Vocal Fremitus.—Diminution on Suppression of the Normal Vocal Fremitus.—Succussion.—Hippocratic Succussion Sound.—Auscultation.—Division of Auscultatory Sounds into Respiratory and Vocal.—Immediate Auscultation.—Mediate Auscultation.—Stethoscopes.—Advantages of the Stethoscope invented by Dr. Cammann.—Dr. Alison's Differential Stethoscope.

The normal vocal fremitus is abnormally increased in a certain proportion of cases of those affections which involve solidification of lung. Increased vocal fremitus, thus, becomes a sign of solidified lung. This sign may be considered as always indicating that the lung is solidified; but is it always present when solidification exists? It is not. It is a curious clinical fact, which we would hardly have expected *à priori*, that, not only is the fremitus not increased in some cases of solidification of lung, when this solidification is complete, as in pneumonia, but it may be actually diminished. I will not undertake to explain this fact; I state it only as a clinical fact. Within the last three years Dr. George Johnson, of London, in a communication for the *Archives of Medicine*, edited by Dr. Beale,* pointed out this fact as an observation original with himself. If, however, you will refer to my work on the respiratory system published in 1856, you will find the fact there stated by me.† Complete solidification of lung, therefore, does not always increase the vocal fremitus, and may even diminish it.

The value of increased vocal fremitus, as a sign, relates chiefly to the diagnosis of tubercle. We examine, of course, in cases of suspected tubercle, at the summit of the chest, and compare the two sides, bearing in mind the normal disparity between the sides. If the question be as to the existence of a tuberculous deposit on the right side, it is not always easy to decide whether a disparity found to exist be, or be not, greater than that of health. The sign, thus, may not be available when the problem is to determine whether tubercle exists on the right side; but if the question be as to the existence of a deposit on the left side, and we find the fremitus on that side greater than, or even equal to, that on the right side, it is a positive sign of much value. This belongs among the numerous signs which may be derived from various sources, in making the diagnosis of tuberculous disease.

Diminution or suppression of the normal vocal fremitus is sometimes a valuable negative sign of pleuritic effusion. If the pleural sac contains liquid, the fremitus is generally lessened, and if the side be filled with liquid, the fremitus is usually abolished. This evidence is more available if the right side be affected, because, should we find the fremitus much greater on the right side, or wanting on the left, although present on the right side, we cannot say positively that it is lessened or abolished on the left side, since a similar disparity is observed in healthy persons. But if we find the fremitus greater on the left side, or present on the left, while it is wanting on the right side, we know that the disparity is due to disease; and if we exclude cases of complete solidification from pneumonia, and if other signs, such as dulness or flatness on percussion, point to the right side as the seat of the disease, we may infer with much positiveness pleuritic effusion.

This comprises all that I wish to say respecting palpation. The method of examination called succussion claims only a few words. By succussion, we mean shaking the body of the patient. A single sign of importance is developed by this procedure in one affection, viz. pneumo-hydrothorax. If air and liquid be contained together in the pleural space, when we shake the body with a certain quickness and force, but not roughly, the agitation of the liquid and air gives rise to a splashing sound resembling that produced by shaking a bottle partially filled with liquid, the mechanism being precisely the same. This sound has been called the Hippocratic succussion sound, from the fact that the ancient father of medicine described the occurrence of a sound somewhat similar which he considered as evidence of the existence of pus. It matters not whether the liquid be serum or purulent, the splashing will be produced provided air be present, but neither air nor liquid alone gives rise to any sound on succussion. The sound in some cases of pneumo-hydrothorax is quite loud, and may be heard at a considerable distance, but in other cases it is necessary to approximate the ear to the chest.

As I have recently illustrated this sign repeatedly to all of you in a case of pneumo-hydrothorax now in the hospital, you are sufficiently familiar with it.

I come now, gentlemen, to the last of the six methods of physical exploration, viz. auscultation—the most interesting and important of all the methods. Not only is auscultation the most valuable of the methods in itself, but it has served to enhance the value of the signs obtained by the other methods.

The signs obtained by auscultation consist of the sounds heard in listening to the chest. We do not ourselves produce the sounds, as in the practice of percussion, but the sounds are produced within the chest by the acts of breathing, by speaking, and by coughing. The sounds produced by breathing and speaking constitute the important signs, and we have at once a natural division of these into, *first*, the breathing or respiratory sounds, and, *second*, the vocal sounds.

Before I proceed to speak of auscultatory sounds, I will consider briefly different modes of practising auscultation. We may apply the ear directly to the chest of the person examined: this is called immediate auscultation. This mode was undervalued by Laennec; in fact, he does not appear to have given it any trial: but it suffices for many of the practical objects of auscultation. It is the simpler mode, and it may be employed more rapidly than when an instrument is used. The practitioner should by all means be prepared to practise immediate auscultation. We may employ an instrument as a medium for the conduction of the sounds; this is called mediate auscultation, and the instrument used is called a *stethoscope*. So impressed was Laennec with the importance of a conducting medium, that he entitled his great work, a treatise on *mediate* auscultation. It is certain that he over-estimated the value of the stethoscope, especially taking into view the kind of stethoscope which he used.

A great variety of stethoscopes, usually made of wood, have been constructed. I now exhibit to you one which may not seem to you to have much beauty, but it is an instrument which I prize most highly. It is a stethoscope once in the possession of the great Laennec himself, and I have no doubt it was made with his own hands. It was presented to me by a friend and former colleague, Prof. Choppin, of New Orleans; it was given to him in Paris by a medical friend who received it from the hands of Laennec. Its authenticity is undoubted, and I infer that it was made by Laennec from the fact that he was accustomed, for amusement, to turn stethoscopes for his own use and for his friends. Moreover, it bears intrinsic evidence of having been made by an amateur mechanic. It is valuable only as a relic: other wooden stethoscopes are far superior to it, both in form and workmanship. But I do not care to detain you with a consideration of the merits of the different varieties, for I believe they will all become obsolete ere long.

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* No. 2, 1858.

† Page 421.

Several years ago, a stethoscope on a novel plan was invented by Dr. Cammann, of this city. It is the bin-aural instrument, which you see we use habitually in the hospital.[*] I began to use this instrument soon after its invention, viz. in the winter of 1854–5. I have used it almost daily, more or less, up to the present time. Having been in the habit of teaching auscultation to private classes, I have induced a large number of students and practitioners to employ it. I mention these facts in order to show that my estimation of the instrument is based on ample personal experience, and abundant opportunity to become acquainted with the experience of others. I look upon the instrument as a most valuable improvement in our means of practising auscultation.

When I wrote my work on the respiratory system, I had used Cammann's stethoscope for a short time only. I then esteemed it highly, but I stated in my work that the pitch and quality of the sounds were modified by it. Dr. Walshe, in the last edition of his work, has quoted this statement in support of an opinion unfavorable to the instrument—an opinion evidently formed without much trial of it. I am satisfied that I did injustice to the instrument by the statement referred to. I experienced some difficulty in judging of those characters of sound dependent on pitch and quality, when I began to use the instrument; but the difficulty was not so much in the modifications of the sound, as in the fact that the greater degree of conduction and the novelty of the instrument required a certain amount of practice in order to appreciate these characters, which I had previously been accustomed to study by immediate auscultation, or with the ordinary cylinder. I am now satisfied that if any one will make trial of Cammann's stethoscope sufficiently long to become accustomed to it, he will consider it so superior to the ordinary stethoscopes that the latter hardly deserve comparison with it. But I wish to impress that, to appreciate the instrument, it is necessary to become habituated to its use. If I am correctly informed, the inventor advocates its use only in cases in which the sounds are with difficulty heard, owing to their feebleness, with the ordinary stethoscope, or the ear alone. I believe if it be limited to these cases, a small part only of the advantages of the instrument will be secured.

The more important of the advantages of Cammann's instrument are the following:—1. Its greater power of conduction, depending undoubtedly on the fact, that the auditory impressions are made on both ears. I do not stop to consider the reason of this. The fact is shown by the effect of stopping up one of the tubes. 2. The exclusion of extraneous sounds by the closure of the ear. To the young auscultator, especially, this is a great advantage in assisting him to concentrate his attention on the sounds which he wishes to hear. It is true, that any extraneous sounds caused by friction of substances on the instrument, are conducted as readily as the intra-thoracic sounds, but we soon learn to distinguish and eliminate them. 3. It is easily applied, the auscultator preserving a comfortable position, and with his eyes directed to the chest. These advantages are sufficiently obvious.

Dr. Alison, of London, has lately proposed an instrument which I now exhibit to you, which he calls the differential stethoscope. He adopts Cammann's instrument, except that each of the tubes inserted into the ear, is connected with a separate flexible, pectoral extremity, instead of being joined to a single extremity. The object is to apply the two extremities to different points, and listen to the sounds from these points at the same moment. I have not given the instrument an extended trial, and perhaps it is not fair for me to form an opinion of it without more experience. The conduction is greatly diminished by the two extremities; but it is easy to appreciate and distinguish between the sounds received, simultaneously, by each ear. My impression, moreover, is, that to compare sounds from different points, it is not so well adapted as Cammann's instrument. This is the conclusion I have formed from a limited trial, and it accords, I think, with what should have been expected. If you wished to compare two sounds from different musical instruments, would you not prefer to listen to each sound in succession, rather than endeavor to distinguish them in combination? It seems to me there is no room for doubt, that the answer to this question should be in the affirmative; and, also, that the same is true of the auscultatory sounds.

With these remarks on the modes of practising auscultation, I shall enter in my next lecture on the consideration of the Auscultatory Sounds.

Original Communications.

MORAL INSANITY IN RELATION TO CRIMINAL ACTS

By I. PARIGOT, M.D.

LATE COMMISSIONER IN LUNACY AND CHIEF PHYSICIAN OF THE COLONY OF GHEEL, BELGIUM; HONORARY PROFESSOR OF THE UNIVERSITY OF BRUSSELS; MEMBER OF SEVERAL ACADEMIES AND LEARNED SOCIETIES.

Our desire being to investigate some forensic difficulty bearing upon philosophical desiderata concerning *volition*, the proof of our activity, and wishing also to demonstrate the absolute necessity of a co-existence of physical and psychical signs, to decide on the real state of persons either supposed to be insane or simulating insanity, may it be permitted briefly to state the general principles of our opinion.

Some philosophers have considered justice as a sort of mystical idea; we believe it to be a function of our conscience. Every man feels that justice is a principle laid down in his soul. Therefore it is that justice is not only found in books of laws made by nations differing in religion, manners, and habits, but that it enables man in every part of the globe to judge of the absolute value of his acts. Moral liberty is one of our attributes. None of us is doomed to fatality; necessity and autonomy are the result of our double nature; but spontaneity always surpasses our material instincts. Man is only responsible when he has been free to choose between right and wrong. Volition is a faculty of our conscience which may be primarily diseased and affected, as any other faculty; and signs of that morbid state may be found in the organism. We understand by *mind*, the outward manifestation of soul by organic and vital agency; thus mind is understood to be subject to all the material conditions of life.

For our present object, we may say that morality is the justification of every man's conduct. On the contrary, immorality designates a want of regard for justice, with a knowledge of offending against written and moral laws; and this latter condition constitutes the malice of the offender. Now, a lunatic has no regard for justice, because his conscience is absent, darkened; and his malice, when he has employed any, is but the reflexion almost of an anterior state of his mind. When there is no free will or possibility of choice, we are able to pronounce that volition is vitiated; the difference between the sensitive faculty, the intellectual power and volition, is easy to detect. We are not responsible for our thoughts, feelings, and sensations; the most absurd ideas may appear in our mind, we are not answerable for them, they are *subjective;* but it is not the same with volition, we are responsible for its result because there is an *objective* relation that binds us with the external world. A momentary loss of reason, an intellectual error, short of duration, has little or no effect on the mind. But when error is protracted, it may, in certain cases, trouble and pervert the intellectual power, or the will and instincts of a man who has indulged that state in his mind. So may grief, terror, and other feelings, act on our brain; much more, when mania or folly are successfully imitated—as it is sometimes done during days and nights by criminals—real insanity may strike the miserable feigner.

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[*] The description of the instrument is omitted, as the reader is presumed to be familiar with it. It is made by Tiemann & Co., Chatham st.

In these cases, error and vice have evidently a morbid and material action on the brain and nervous system; the difficulty is to ascertain when that change takes place. Medical science has answered some of these difficult questions, or established the impossibility of penetrating the nature of that intimate action. At all events, it has been thought that the best solution of these difficulties could only be given by medical investigation. But, in the course of things, it has been found that a very learned and respectable body of men, who make pure philosophy and jurisprudence their special object of study, have interfered in these cases, assuming that they knew better how to solve difficulties involving judicial matter and insanity. Now, if the study of the human body and its functions have something to do with insanity (and it is pretty clear it has), lawyers and pure philosophers ought to resign their pretensions; but they are unwilling to do so, because they suppose insanity to be a moral infirmity having no real corporeal existence. The consequences of that opinion have been fatal to the insane, so much so, that laws on insanity were made when insufficient notions did not permit legislators to master their subject; and to-day, it is said with severity but with justice, that some of these laws lead to the grossest mistakes and even to judicial crimes! In no country that we know of, proper and scientific means of ascertaining insanity are at all adapted to the actual state of our knowledge; and it is painful to say, that in spite of the efforts of learned and renowned physicians, unhappy lunatics have often suffered the extreme penalty of the law. In these melancholy occasions, nothing could avail against absurd prejudices of public opinion and against the cruel and sometimes shameless interference of newspapers, when human justice (that painters represent blind) was trying to ascertain its doubtful course.

Regarding the medical profession, we ought to come to an understanding on medico-legal difficulties, and never to enter the witness-box with a prejudiced mind in favor of the party that has called us in; science must be our only object and supreme law.

Unhappily, men living by liberal professions are more or less disposed to opposition or jealousy on account, perhaps, of material interest; the effect of which in courts of justice must necessarily throw ridicule on them. But what is worse for the administration of justice is, that learned judges, ingenious barristers, and medical officers, are often at variance because they do not admit the same definitions of metaphysical terms; this is to be remarked especially in cases of moral insanity. One of the objects of the present paper, is to try to dispel some obscurity concerning the diagnosis of moral insanity, including homicidal, suicidal, and impulsive mania and monomania.

What is the pathological meaning of moral insanity? Dr. Prichard says that it is a disorder, the symptoms of which are only displayed in the state of feeling, affections, temper, and in *the habits and conduct* of the patient. This definition shows that it principally concerns the faculty of willing, choosing; in a word, the self-government of an individual relating to his acts. Eminent and celebrated American writers entertain the same opinion. The celebrated Dr. Ray adopts this definition of moral insanity; and Dr. Beck says, that besides the impulse to murder, there is also included an irresistible disposition to commit injury or to do mischief of all kinds.

Here, then, we have the full perversion of volition and natural instincts; and moral insanity may be defined a perversion of our will, but that name is improper, because it has no relation to its nature and object. Nobody doubts that there are differences between men according to the nature of their will, which makes their special character. Will may be vitiated—criminals cannot modify its laws; and if we want more evidence on the nature and fatal dispositions concerning our will, let us read the excellent paper on the *Involuntary Confessions* inserted in the January number of this year of the *American Journal of Insanity.*

Now, Drs. Bucknill and Tuke, in their work on *Psychological Medicine* (certainly the best work written lately), say that the diagnosis of moral insanity is of the utmost importance and often of the utmost difficulty, but they think that physical symptoms, standing by themselves, are of little importance in its diagnosis. We do not admit this proposition. In insanity, physical symptoms never stand by themselves unaccompanied by moral symptoms; we intend to show the necessity of the presence of both, as well in moral insanity as in the simulation of it, in order to be able to detect the reality of both cases.

The study of forensic medicine and its lately great progress are, in a certain measure, the result of cases which attracted great notoriety. In almost each trial in which insanity is the plea of defence, the prosecution maintains, books and examples in hand, that such a disease as *moral insanity* does not exist; all criminals are, more or less, *morally insane*, i.e. *wicked*, *dissolute*, and *perverted.* On the other side, the defence has often resorted to the plea of insanity as a remaining chance of acquittal; now, physicians also, moved by a desire to wrest from the scaffold some prisoners that appeared to them more deprived of reason than malicious or wicked, have been too far in their philanthopic feelings; they have interposed and exposed their authority when they had no business to do it. We are convinced that the reaction of courts and lawyers, at least in Europe, against our profession, is, in a great part, owing to our autocratic pretensions to dispense life and liberty under the protection of our diplomas.

But if we have been sometimes unjust, it has been repaid with accumulated interest. I believe that there is no court in the world that has not had cases of moral insanity to try. How have we been treated there? When well-meaning physicians did venture to explain the special nature of certain cases, they were each time mystified, scientific explanation was quibbled, or dissected with metaphysical subtlety, and the *savant* that tried to preach to a sceptical audience was laughed at or rudely turned out of the forum!

It may be read in Dr. Winslow's journal, that in a court of England, the late Lord Campbell said to three learned physicians—"*You may go home to your patients, and be more usefully employed there than you have been here!*" Another learned judge said:—"*That his experience taught him there were few cases of insanity in which any good came from the examination of medical witnesses! Their evidence sometimes adorned a case and gave rise to very agreeable and interesting scientific discussion, but after all, it had little or no weight with a jury!*"

We might report many other examples of curious opinions given by learned judges sitting on their bench of justice, to confirm what we advanced about the singular pretensions of jurists respecting medical science; but it is unnecessary, the time will come, when a real understanding shall exist among learned men wishing to vindicate truth.

If moral insanity be considered from the point of view of its flagrant attacks on social life, and if, at the same time, the false criterion of knowing right from wrong has been employed as a test for insanity, then, the logical inference is, that such acts must be repressed and their perpetrators punished. But the case is different if physical and mental symptoms agree to indicate a disease of the brain. From that scientifical point of view, the offender, at the moment he committed the crime, had no power to control his diseased volition, nor had he the faculty of *choosing right from wrong.*

For us, we consider such an offender, under a real mental ailment, as insane as the most demented of his fellow sufferers. Some very learned alienists do not consider of any value what belongs to the material side of symptoms in insanity.

Relating to monomania, which is often but a species of moral insanity, Dr. Delasiauve, the distinguished physician of Bicêtre, contends that it is only a lesion of the *sentimental order*, when it clearly belongs to an alteration of the will and instincts. Delusion in feelings, emotions, and in our understanding, is only *accidental* in moral insanity. Hence the mistake and origin of conflicting names—as, *mania sine delirio—folie raisonnante—gemüthskrankeiten—moral insanity, impulsive insanity*, and the numberless monomaniæ; all of which have but one cause, the perversion of will and instincts, for which we have proposed one generic name, that of *diastrephia.* The confusion resulting from a pure psychological misunderstanding must have had a bad influence on the opinions of jurists; they doubted even that there was a real morbid state called *moral insanity*, and were unwilling to declare irresponsible the lunatics that were neither *idiots, maniacs*, nor *demented.*

Unfortunately, some physicians supported these views on partial insanity. They maintained, that a presumed criminal is not responsible when his mono-delirium, although limited, is the motive of his crime; *but when, on the contrary*, the motive of the act *does not relate* to his peculiar delusion, they say that it remains to the judges to appreciate in what degree the influence of a partial delusion may diminish his responsibility. This is a false doctrine. Why do you neglect the bodily symptoms, your own ground, to ascertain if that man is insane or not? Besides the solidarity of the functions of the mind which is at a stake, a pure medical case is left to the appreciation of judges, in every other way competent, but unacquainted certainly with the numerous forms of insanity. It is in the very name of justice that we oppose such a nocive doctrine!

Metaphysics can find no line that clearly separates reason from madness. The celebrated Lélut says:—"That in its beginning, insanity is still reason, just as reason is already madness." If mental symptoms run in each other, why not have recourse to the physical ones? They are inscribed both in nature and in our books on pathology; let us only take the trouble to find them.

Many jurists and some physicians, unable, perhaps, to find rules to ascertain the limits of reason, ask the following questions:—What is free will? Where are its limits? Can a man master his volition while in a violent passion? If he loses his free will, is that man responsible for his crime? We propose the following answer:—First, it is quite useless to search for an explanation of the nature of free will, a practical consideration of it concerns only diastrephia. We think human liberty or free will ought to be considered as a moral power, that each man may acquire by the means laid down in his conscience, so as to free his mind, as much as possible, of its material condition. Certainly, that power is not equally acquired, and we do not reach all of us the same degree of freedom. Some, under painful circumstances, remain more subject to *necessity* and its material laws; others, favored by education or special gifts, become more autonomic. Thus, free will is not an absolute power, and has not the limits asked for in the above questions; but it is also, therefore, that men are not equally deserving of punishment according to penal laws, because circumstances speak for or against them. Now, it is easy to see that free will can have no degrees of perfection or imperfection in an insane person, because that very state excludes the possibility of raising or even entertaining that moral power. How can we require the application of a thing, the source of which is extinct? Why, it is that very material condition (in its worst failure) that deprives that unfortunate madman of his liberty.

Raving passion, hatred, anger, animal indulgences, do not destroy our liberty. Instantaneous madness may occur, though rarely; more often in these cases, premonitory symptoms escaped observation; but generally, decision has always preceded action. This is so true, that many criminals have confessed to have been obliged to get themselves under the influence of spirituous liquors to carry out their plans. In this case, drunkenness is no more an excuse for crime than any passion, because free will should have been *purposely* diminished or oppressed. There is not the slightest affinity between criminals and insane; the question relates to the disease we now examine—*is to be or not to be*—certainly, criminals are liable to become insane, and idiots and imbeciles are often met in prisons, but as far as conscience is concerned they have nothing common.

In our estimation, *diastrephia* has the same relation to an *act*, that *delusion* has to a *thought.* They are terms indicating the error and guile of an insane person relating to actions and ideas. But actions are much more important than thoughts, and therefore, if we were forming a sort of algebraical equation of these terms, they could not be inverted, no more than logic or grammar allows to say—*the delirium of an act*—meaning its folly or insanity.

From this special point of view, insanity considered in its objective relation, furnishes us with a definition for forensic practice, it is *the loss of power of control either over one or more mental faculties, including especially the absence of free will, and demonstrated by moral and physiological symptoms.* We do not attempt to give a complete definition of mixed phenomena, we must content ourselves to know that there are points where material and spiritual phenomena join together and are dependent on each other. What we are certain of as medical men, is, that if vitality and materialism confine themselves to the conservation of our individual and species; if, to fulfil animal functions, nature employs sometimes brutal force and violence repugnant to our feelings; we know also that intellectual life, by a contrary law to fatalism, tends to enlarge our horizon, it generalizes the egotistical principle by applying its rules to a larger circle of our fellow creatures; then the mind, in its natural expansion, becomes more free. Finally, it enables us to enter regions of intellectual and spiritual life entirely closed to our senses, then free will acquires the sufficient power to break our servitude.

Always and everywhere, fatality, brutal force, and slavery, must give way to intelligence, charity, and liberty.

(*To be continued.*)

CASE OF
RETROFLEXION OF THE UTERUS.

By E. TRENOR, M.D.,

OF NEW YORK.

On the 24th of August last, I was called to attend Mrs. D. I found the patient, a married lady æt. 25 years, in a very nervous and depressed condition, complaining of severe pains in the hypogastric and ovarian regions, with much tenderness on pressure over those parts, insomnia, constant nausea, great weakness, and feeling and looking very wretched and worn out. The bowels were regular, and there was no pain in passing water.

Upon inquiry I ascertained the following history. The patient menstruated at 14, married at 22, and was never pregnant: was always accustomed to suffer severely at the monthly periods, but the menstrual function was otherwise perfectly normal. In every other respect she enjoyed very good health. She was as well as usual up to within a few days of July 1st ult., on which day, after taking a long walk, was attacked by severe bearing-down pain in the lower part of the abdomen. This pain continued with daily intermissions up to the 10th of July, when the menses appeared, this being the expected time of their recurrence, ceasing on the 14th: the pains, however, remained and increased, and were soon accompanied by occasional nausea. On the morning of the 18th, feeling a little better than for some days previously, she went a short way out of the city on a visit to a friend, and in the afternoon an exacerbation of her bad symptoms occurred, with the addition of a heavy burning pain in the region of the anus and rectum, causing her to apprehend an attack of dysentery. This fear, however, proved unfounded, and after remaining in bed at her friend's house for thirty-six hours she felt sufficiently well on the morning of the 20th to return home, when she went to bed, and for the first time sent for a physician. This gentleman apparently did not recognise the malposition of the uterus, and his treatment, consisting mainly of local cauterization, together with emollient and astringent vaginal injections, proved inefficient. Her sufferings continuing to be severe; and about the end of the first week in August he advised her to go to the country and try change of air, although the patient states that she was then so reduced as to be unable to walk across her room unassisted. Shortly afterwards he left the city temporarily, and she was seen once or twice by another physician, who, however, made no vaginal examination. She experienced no relief from his services, and for about ten days continued without any treatment whatever. At the end of that time she sent for Dr. T. G. Thomas, of this city, who diagnosticated retroflexion of the uterus, and replaced the organ, but being unable at the time to attend her, requested me to take charge of the case, advising the use of a "double S" pessary. I saw her for the first time on Saturday, Aug. 24th, her general condition being as first described. On examination the vagina was moist and relaxed, its temperature somewhat higher than natural, but not tender to the touch; cervix uteri rather large and considerably depressed and displaced forwards; no ulceration or abrasion sensible to the touch; os slightly patulous. On passing the finger up along the posterior wall, at the junction of the cervix with the body of the uterus, the organ was found to be completely retroflected, the fundus lying in the hollow of the sacrum pointing downwards and backwards, and forming with the inflamed and enlarged posterior wall a globular tumor, having upon it small rounded hobnail protuberances, and exquisitely painful on being touched. I immediately attempted to place the dislocated fundus in position, the lady being directed to rest upon the elbows and knees, but desisted on finding that the tumefied organ regained its malposition as soon as the support of the fingers was withdrawn, the pain produced by the attempt being also of the severest character. The next morning, after putting the patient under the influence of ether, I succeeded in effecting reduction, and retained the organ in position by means of a "double S" pessary of hard rubber. That afternoon I was sent for in haste, being told that Mrs. D. was suffering agony from the presence of the instrument, but upon reaching her found that it arose not from pain but from apprehension, the lower transverse bar of the pessary pressing upon the urethra so as to interfere with micturition, and this, in her nervous, almost hysterical condition, she had magnified beyond measure. The difficulty was overcome by showing the patient how to depress this bar with the end of the finger so as to free the urethra; and the instrument was retained in the vagina. On calling the next day, Aug. 26th, I found the patient decidedly improved, having had a tolerable night's rest for the first time in over five weeks, the abdominal pains somewhat less, and the nausea diminished. A vaginal examination showed the condition of the uterus to be unchanged, the pain on pressing the posterior wall being as great as ever, though the cervix was quite free from undue sensibility. She was directed to rest in bed, and to take morning and evening a vaginal injection of warm water. Aug. 28th.—She has continued to improve steadily, has now an appetite, pain and tenderness of abdomen almost gone, rests well at night, and is cheerful and feels stronger. As the lower transverse bar of the pessary still interfered with micturition, a central piece was removed from it so as to free the urethra, and a transverse bar added higher up to prevent approximation of the sides by the pressure of the vaginal walls. The patient was directed to continue the vaginal injections, and permission given to leave her bed and live as usual. Sept. 1st.—She feels well and in good spirits, is gaining strength, and has been up every day since last visit. As the enlarged posterior wall of the uterus continued nearly as painful as ever on being touched, six leeches were applied to the cervix; the bleeding from their bites continued nearly twenty-four hours, and the next day the pain on pressure was greatly diminished.

From this time onwards the treatment consisted merely in wearing the pessary always, and in the occasional application of three or four leeches to the os at intervals of about two weeks. The patient rapidly regained strength and flesh, and now (Oct. 23d) feels perfectly well in every respect, takes long walks without fatigue or any ill consequence whatever, and, to use her own words, would not know there was anything the matter with her if I did not tell her so. The knobby elevations and unevenness of the posterior uterine wall are entirely gone, but a little tenderness on pressure still remains, showing the continuance of a sub-acute inflammation; and for this I have advised her to become pregnant if possible. A smaller instrument has been substituted for the one originally employed, and as the weight of the posterior uterine wall has considerably diminished, it does not cause such pressure of the instrument on the urethra as to interfere with micturition, and this one has therefore not been altered from its original shape. But Mrs. D. finds she cannot do without it, as its removal is quickly followed by a renewal of unpleasant symptoms, such as nausea and malaise, the uterus regaining its malposition and soon becoming more tender to the touch. She is now, however, so well as to be able to travel without any unusual fatigue or discomfort, and will shortly go to the country.

CASE OF

COMPOUND DISLOCATION OF ANKLE-JOINT;

OUTWARD DISLOCATION OF TIBIA, WITH FRACTURE OF TIBIA AND FIBULA.

By EDMUND ARNOLD, M.D., M.R.C.S.E.,
OF YONKERS, N. Y.

Mrs. B——, a lady æt. 60, of feeble health and delicate frame, on crossing a garden-path after dark, Monday, Oct. 15th, 1860, stepped into a trench (opened for a drain pipe), about eighteen inches deep, and fell over, her left foot turning under her. She felt a snap, and on putting down her hand felt bone projecting through the stocking. I saw her shortly after the accident, about 10 P.M. The stocking was cut off, and the following state of things revealed. The foot, considerably shortened in appearance, was directed at almost right angles inwards, resting on its outer edge. On its anterior aspect the end of the fibula, denuded of all its ligaments, projected through an open wound of about two inches in length, and extended to almost a level with the sole. There was also fracture of the fibula about three inches from its extremity, and fracture at the internal malleolus, leaving the main broad articular surface, as I judged, unscathed. The dislocation of the tibia was therefore outwards and backwards, throwing the disengaged external malleolus forwards. There had been considerable surface bleeding, but hæmorrhage had now ceased, and there was accordingly reason to believe that the main arterial communication was intact. Nevertheless, the injury was a fearful one, and taking into consideration the feeble general health of the sufferer and her advanced age, the attempt to save the limb seemed almost hopeless; I determined, however, to try. The reduction was effected with the greatest ease, everything that could interfere seeming to be torn through; some little difficulty, however, was experienced in passing the end of the fibula back under the skin. I did not attempt to close the wound, which, after having secured the parts *in situ*, by means of an inner straight splint with side-piece for foot, was dressed with tepid water and laudanum, covered with oiled silk, and the whole supported on a pillow raised at the sides. Thirty drops of laudanum were given, to be repeated, if necessary, half-hourly until the patient was composed. *Oct.* 16.—Passed a comfortable night. Not much pain now. Pulse 100. Placed the limb on a McIntyre splint, and continued the same dressings. *Oct.* 18.—Wound assuming a more angry appearance. The patient complains of much pain and stiffness. The foot appears to roll inwards somewhat. The better to secure it again, applied the side-splint. Cannot reach the wound very readily to dress it without disturbance of the limb. *Oct.* 20, afternoon.—To-day the foot has assumed a truly alarming appearance, the wound becoming larger and deeper, with raised and everted edges, and the instep intensely red and inflamed, as well as very tender and painful. Applied six leeches, and put on a poultice of bread and milk. These gave great relief. *Oct.* 22.—Was called at 5 A.M. The patient passed a very restless night. The foot was now exceedingly tender and painful, the wound more angry than ever; in fact, the inflammation was intense, and mortification to be dreaded. Repeated the leeching, kept up the bleeding for several hours, with fomentations of hot hop water, and requested a consultation. Again marked relief followed.

On the afternoon of 23d, I met in consultation an eminent New York surgeon, who recommended throwing off all bandages, laying the limb in a bran box, slinging the heel hospital fashion, and poulticing to promote suppuration, which was done, as soon as the materials could be obtained, on the following day. Within two or three hours after these appliances were made, every muscle got on the jerk, and the patient became exceedingly distressed. We had not made sufficient allowance for broken bones and lacerated soft parts, the main support of the foot being now mainly below, and such as it received from resting against an imperfect articular surface.

It became now evident, that if the foot was to be saved, the following indications must be accomplished:—To support and steady the foot; to antagonize the muscles of the inner side so as to prevent them from putting the wound on the stretch by rolling the foot inwards; and, thirdly, to make the sore itself more accessible to dressing without disturbance. These ends were gained by the following simple contrivance. I had a thin light splint made of hard pine, consisting of four pieces; one two and half inches wide, to extend along the inner side of limb; one for the under side, hollowed out below as far as requisite strength would permit; a side piece for inner surface of foot, and a sole piece. Between the two latter an aperture was made, long enough to pass a piece of inch-wide strapping through. This splint was lined throughout with English lint, and the limb now put up as follows: After enveloping it in a many-tailed bandage, it was laid on the splint, the heel slung, and the foot secured to the sole piece by a band of strapping, a fold of linen being placed under the latter as it passed over the foot. A small pad was next laid in the hollow of the heel, and the limb firmly secured to the side splint by a band of strapping an inch and a half broad, and applied as near as possible to the wound. A third band below knee completed it. With this light apparatus on, the wound could be reached and the limb rolled over without the slightest disturbance, and the splint, of which I had two made, could, when necessary to make a change for purposes of cleanliness, be removed and replaced in as little time as it takes to describe it. The better to allow of movement of the body, I had laid under the limb a piece of board, eighteen inches long and four wide, covered with a thin pillow, raised at its edges by rolls of sheeting, and the two lower corners provided with tapes, tied together across the foot piece, the whole being secured by two pieces of bandage run under the board and tied over the limb. In this way she could be shifted from side to side of the bed, or even to a lounge, the limb being carefully carried on its tray. From this time all danger rapidly subsided. The sore, which was as large as half a dollar, with deep ragged and everted edges extending back to the tendo Achillis, and with the bone visible to some extent at the bottom of it, at once assumed a healthier appearance. In three days the bone was hidden by granulations, and in a week an almost entirely flat appearance was presented, on the surface of which skin soon commenced to form from above downwards. The applications to the sore consisted simply of bread and chamomile poultices in the first instance, and chamomile water dressings subsequently. Long sloughs escaped from time to time, and occasionally the new skin would give out to admit of small discharges, but immediately heal again, and in spite of very poor general health, the cure went on uninterruptedly. Patches of herpes in various parts of the body, but especially near the sore, were a source of much distress. She would frequently wake in the night with palpitation and difficulty of breathing; the sound limb became swollen and œdematous, and often required hot water bottles; her appetite continued throughout poor, in spite of bitter tonics and stimuli of every kind, and her bowels were hard to regulate. Yet, by the middle of December, the wound had entirely closed; by Christmas Day she was able to keep her foot down on a stool, and shortly after to get round with a crutch, which, by the opening of spring, she threw aside. Passive motion she has ever stoutly resisted, and even at the present time will not attempt to use the joint, so great is her dread of breaking it again. She limps somewhat; but as she can, with the heel on the earth, raise the toes well off the ground, there is evidently no anchylosis; and if she could have been induced to use and work the joint more, the cure might have been perfect. As it is, the limb is now in every way as strong as the other, and with very little difference in appearance.

Reports of Hospitals.

BROOKLYN CITY HOSPITAL.

OPERATIONS WITH ECRASEUR.—COMPOUND FRACTURE OF SKULL.

SERVICE OF DR. J. C. HUTCHISON.

THERE has been so much difference of opinion among many surgeons with reference to the true use of the ecraseur, that it becomes the duty of every one who has made a trial of the instrument to record his experience. When it was first introduced, as is often the case with a new thing, its applicability was claimed as almost universal, and the consequence was that very many refused to test its usefulness in any shape. Time, however, has now served to draw a medium between these two extremes, and we find ourselves settling down to the real appreciation of the merits of the instrument. The action of the instrument, by tearing through the tissues, is sufficient to prove *à priori* its great utility in all those operations attended with excessive or troublesome hemorrhage, and by its form, and convenience of application to certain parts of the body, it renders the performance of an otherwise difficult operation, easy, rapid, and safe. In the two following cases, the good points of the instrument are well illustrated.

Fistula in Ano; Operation with Ecraseur.—P. McG., a seaman, æt. twenty-five years, entered the hospital May 3, 1859. Has a *blind external* fistula, which has existed for about one year; has never had any serious sickness; respiratory organs in good condition; no hereditary taint. The fistulous opening is one inch from the margin of the anus, a probe passes up its track two and a half inches, and the point can be felt through the walls of the rectum when the finger is introduced. Injections of tinct. iodine into the fistula having been thoroughly tried without benefit, the sphincter ani muscle was divided with the ecraseur on 22d June, in the following manner:—A good-sized trocar and canula was introduced along the track of the fistula, and an internal opening made by projecting the trocar; this was now withdrawn, and one end of the wire cable of the ecraseur carried through the canula into the gut and brought out at the anus. The canula was then removed from the fistula and slipped over the other end of the cable. The extremities of the wire were now attached to the ecraseur, and the intervening parts divided. The operation occupied twenty minutes and only a few drops of blood were lost. The wound was dressed in the usual manner, and at the end of a month it was so nearly healed that he was discharged.

Amputation of Penis with Ecraseur.—M. M., a seaman, æt. thirty-nine years, entered the Brooklyn City Hospital, May 11th, 1859. Was attacked with a phagedenic chancre while at sea, six weeks before admission, which resulted in complete separation of the glans penis on 4th June. The slough extended along the urethra, half an inch posterior to the stump, and the prepuce had contracted adhesions to the extremity of the urethra so that the stream of urine was directed downwards and backwards during micturition in the erect posture. In order to relieve him of this inconvenience, as well as to get rid of the diseased mass, the penis was amputated with the ecraseur, an inch and a half from its root, just behind the anterior extremity of the urethra. The operation occupied about twenty minutes; there was no hemorrhage. The wound was dressed with greased lint, and a No. 9 bougie was introduced daily in the end of the urethra so as to prevent contraction. On the 24th July the stump had entirely healed, and the urine was projected in a good stream.

Compound Fracture of Parietal Bone with Depression; depressed bone removed; large clot of blood on dura mater; no cerebral disturbance; recovery.—Thomas Murray, æt. eight years, entered Brooklyn City Hospital, May 28th, 1859. Eighteen hours before admission he received a blow on the head with a brickbat, which was thrown from the top of a building, producing a compound fracture of the left parietal bone near its posterior superior angle. A portion, one-quarter by two inches, was depressed nearly the whole thickness of the skull. He had no cerebral disturbance, complained of no pain, and indeed felt perfectly well. After consultation with the surgical staff I decided to elevate or remove the depressed fragment. The scalp wound was enlarged so as completely to expose the fracture, when I ascertained that the internal table was fractured to a greater extent than the external, and the point of the elevator could not be introduced underneath the fragment so as to elevate it into position. The overhanging edge of the undressed bone was therefore gnawed away with the *gouge-forceps* to a sufficient extent to allow the fractured portion to be removed. A large clot of blood was found beneath it, which was partly removed with the forceps. The wound in the scalp was partially closed with adhesive straps, water dressing applied, and he was kept quietly in bed. Recovery took place rapidly without any untoward symptom.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, October 9th, 1861.

DR. A. C. POST, PRESIDENT, IN THE CHAIR.

MALFORMATION OF THE HEART.

Dr. J. Lewis Smith presented the heart of a boy, who died at the age of five and a half years, in the service of Dr. Lambert, at the Child's Hospital. This child was from his birth delicate, and his mother had noticed unusual pulsation or beating of the heart at an early period. When he became old enough to walk about, which was not till the age of two years, he was easily overcome by much exertion. At the age of about three years he had a serious attack of sickness, called by the physician brain fever, since which his mind appeared to be affected. He was uniformly dull and quiet. He was admitted into the nursery attached to the Child's Hospital on the 16th of June, 1860. His speech and movements at this time were imperfect, and his appearance was œdematous. He remained in the nursery without material change till the last of March, 1861, when he had an attack of hooping-cough, but recovered without any untoward symptom. On the 19th day of June he was returned to the hospital. At this time he was languid, disposed to sleep much, respiration hurried and labored; pulse from 160 to 180; lips livid; appetite capricious; general appearance œdematous; but he was still walking about; râles were noticed in both sides of the chest; the action of the heart was tumultuous and forcible; mustard was applied to the chest: ammo. carb. and brandy were given, and tinc. digital. gtt. ii. every two hours, which reduced the pulse in twelve hours to 120. There was, however, no decided improvement. At a subsequent examination the liver was found much enlarged, producing distension of the abdomen. His condition continued the same until July 14th, when, after having been out a short time, he complained of exhaustion, and died suddenly.

Sectio Cadaveris thirty hours after death.—Body œdematous; rigor mortis; hemorrhagic spots on the whole body and lower extremities; about half an ounce of clear serum in each pleural cavity and in the pericardium; the heart and blood-vessels attached to it uniformly enlarged, the former weighing ℥ xii. At the commencement of the aorta were two valves instead of three, and directly underneath the valves was a constriction or narrowing, closing the orifice so as not to admit the little finger. Other portions of the heart were healthy, with the exception of the uniform hypertrophy; the two sigmoid valves appeared to be sufficient to prevent regurgitation. The liver weighed ℥ xxxiv. and was of a natural color; the other abdominal organs healthy; brain not examined.

FIBRO-PLASTIC TUMOR OF BONE.

Dr. Sands presented a specimen of deep-seated disease of the bone on behalf of Dr. Parker. About ten days before Dr. Parker amputated the leg on account of the general disturbance produced by disease of the leg. The patient was a woman fifty years of age, who had been well until this disease in the leg appeared. The first intimation she had of it was a pain of considerable severity, deeply seated in the calf of the leg, which for a long time was unattended with any swelling of the part. In the course of the last eighteen months a swelling first began to show itself, and gradually increased; the pain also became rather more severe, extending throughout the lower part of the leg, in the foot, and also along the course of the sciatic nerve. In order to relieve this pain she was in the habit of taking upwards of two grains of morphine a day. This practice interfered very much with her digestion, and when Dr. Parker first saw her, a short time before the operation, she was emaciated and pale. The limb, previous to its removal, presented a swelling as large as a bony tumor about the size of an orange would be expected to make, covered with the muscles of the calf. The swelling presented backwards and somewhat to the external aspect. Amputation was resorted to as the only expedient, and it was not until after the operation that the true nature of the disease was discovered.

Dissection of the limb.—On removing the integuments of the amputated limb, there was a good deal of subcutaneous cellular tissue, but the muscles of the calf were stretched over the tumor and attached to it with a considerable degree of firmness. On throwing aside the gastrocnemius muscles and separating that portion of the soleus having its origin in the fibula, a large rounded tumor was exposed connected with the fibula, evidently developed from underneath its periosteum, measuring about two inches and three quarters in diameter. It was covered by a very thick deposit of fibrous tissue, and was so placed in its bony bed that it could be almost enucleated. In some places the bone had undergone a very remarkable increase in thickness, while in other places the bone was encroached upon. In addition to all this, there was an outdrawn piece of bone connected with the hypertrophied portions, three inches in length, which stretched towards the ankle joint. The posterior tibial nerve lay in a groove alongside of the tumor and was considerably enlarged; the peroneal nerve was also found to have close connexion with the tumor, passing along its outer side, and was embedded in the fibrous tissue covering the tumor. For a very considerable time previous to the operation the muscles of the calf were in a state of tonic contraction, causing the foot to be extended.

The tumor, on microscopical examination, proved to be fibro-plastic in character.

In conclusion, he wished to ask if any of the members knew of the recurrence of a fibro-plastic tumor of the bone, and stated, on the authority of Lebert, that such sometimes does take place.

Dr. Post supposed that such tumors were the same in character as fibrous polypi that grew from the basilar process of the sphenoid bone. Having one such case to treat in consultation, he had looked over authorities carefully, and found it stated that they very frequently recur on account of imperfect removal.

Dr. Markoe was of the opinion that many tumors, although not decided malignant by the microscope, partook of a malignant career. This was true of the fibrous tumors, but particularly of the fibro-recurrent. Whether the microscope should be able to discover the cause of such a state of things, he was unable to determine.

Dr. Sayre had seen fibroid tumors transformed into malignant tumors, and had a case at that time under treatment which illustrated the fact. About six months ago he amputated for fibroid disease, declared such by a reliable microscopist; and about three weeks ago an ulcer appeared on the stump of an unmistakable malignant character. There was also a case in Bellevue Hospital, in which Dr. Parker removed a fibro-recurrent tumor from the back, which had returned after two successive operations.

Dr. Sands also presented, on behalf of Dr. Detmold, a small epithelial tumor, which was of interest from the fact that it had been situated on the upper lip of a woman forty years of age, remote from the angle of the mouth.

The Society then adjourned.

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OBSTETRICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

May 20th, 1861.

DISCUSSION ON SCARLATINA.

Dr. J. Lewis Smith, in opening the discussion, said, that scarlet fever had been epidemic in the upper part of the city during the past eighteen months, and in many cases of a malignant type. It is both an epidemic and contagious disease; it is communicable not only from person to person, but also through the medium of a third person, and by clothing; it is believed also by some to arise *de novo*, at least we are often called to cases which we cannot trace to exposure. When occurring through exposure it has no fixed period of incubation; the time varies from two or three days to as many weeks, or longer. In one case which fell under his observation the incubative stage appeared to be accurately fixed at six days. The disease generally begins suddenly with fever proportionate to the severity of the attack. In several cases there is delirium at night, and twitching of the limbs. Symptoms threatening convulsions, which sometimes occur. Vomiting is generally present among the first symptoms. In ninety-four cases treated by him, it took place in eighty-one, for the most part on the first day, but in some not till the second. This symptom is often slight, so as to escape the knowledge of the physician, unless he makes inquiry.

Dr. S. regards it as a symptom of some diagnostic value. The bowels in most cases are not disturbed, but in severe attacks, especially if the eruption is tardy in making its appearance, they are sometimes loose. In twelve to twenty-four hours in ordinary cases the rash makes its appearance, first on the face and neck, and then the body and extremities; after two or three days it gradually fades away, and is followed by desquamation and recovery. In cases of a severe type, the danger during the first days is cerebral, convulsions or coma is apt to occur. Sometimes there is, no doubt, cerebral congestion; but in a large proportion of cases, the cerebro-spinal system is poisoned by the scarlatinous virus in the same way as in Bright's disease the brain is affected in the adult. If the child survives this dangerous period the anginose affection then appears. In all cases there is more or less inflammation of the throat, and in severe cases, during the latter part of the first week, or in the second, a pseudo-membranous deposit forms on the fauces with ulceration underneath, and with cellulites producing more or less external swelling. He has examined this deposit under the microscope, and it shows distinct fibrillation. Sometimes a confervoid growth consisting of branches and sporules is found upon the fauces. The death of the child is often in great part due to the obstinacy of the throat affection, and the consequent exhaustion.

Dr. S. then exhibited under the microscope a fibrinous deposit, from the throat of a child eight years old, who was suffering severely from scarlet fever, but ultimately recovered.

Dr. Worster said, in his opinion every grade of scarlatina exhibits evidences of exhaustion rather than of congestion, and he would on this account begin early to stimulate his patient. He related the case of a child of four years, in whom, after the first stage of the disease, the parotid gland of one side and the lymphatics of the other, became enormously swollen; his treatment consisted of applications of ung. iodidi comp. A physical examination had revealed no trouble of the lungs, and the case progressed favorably till the seventeenth day, when suppuration of the parotid occurred, and on the following day a sudden hemorrhage, probably pulmonary, took place, which caused his death. He had never known a like termination of scarlatina before. His experience had taught him that much treatment in this disease was injurious. He relied upon such as was simply supporting in its nature.

Dr. Blumenthal remarked that scarlatina runs an irregular course, and it is difficult to keep track of its many changes. Our imperfect treatment he thought due to our imperfect knowledge of its pathology—believes the cerebral and renal symptoms rather incidental than essential to the disease. The therapeutics are necessarily imperfect—considers it an asthenic disease. The treatment should be passive, as long as possible, and we should only interfere when absolutely necessary; the grand principle of treatment being to sustain the patient. Stimulants are conceded to be the best remedies—believes frictions externally also important.

Dr. J. G. Sewall said, that in the epidemics of scarlatina he had witnessed in the upper part of the city, the disease had appeared very decided in respect to its mild or grave character; the first required little or no treatment, but we could not tell at the onset how severe even a mild case might become. We are to guard, if possible, against the retroception of the eruption, for the usual complications are apt to be more or less grave, in proportion to the abundance or scarcity of the eruption—thought the tendency to death was by asthenia, though in some cases occurring by typhoid symptoms. Considered inunctions of great importance. Mentioned tr. ferri muriatis, chlorate of potash, beef tea, and milk punch among his means of treatment. When suffocation is imminent, uses applications of nitrate of silver to the throat; and to relieve the glandular swellings applies salt pork, externally; lauded warm baths in all stages of the disease, as a preventive means against succeeding anasarca.

Dr. Bachelder stated that the incubative stage may not exceed twenty-four hours' duration, and related a case in illustration of this fact. Of the remedies, thought highly of chlorate of potash, especially for relief of the throat affection, and was not certain but it might do good in any case. Believed exposure to cold almost the only cause of the sequel, anasarca, and it should be carefully guarded against. Had been inclined to have confidence in the prophylactic properties of Belladonna, and had used it extensively. Of a solution of three grains of the extract to one ounce of water gave as many drops as the patient numbered years, and increased drop by drop till the pupil was affected. Did not always witness the specific eruption of the remedy. The result, after convulsions in this disease, is apt to be fatal, had never seen a recovery when convulsions happened after the development of the scarlatinous eruption.

Dr. Kennedy looked upon scarlatina as one of the most formidable and important of diseases. It has become one of the fixed diseases of the community, though much modified in severity within the past twenty years. Formerly it often took off many children in a family. Deems it impossible to trace its source, though it may be both contagious and epidemic; it varies in different seasons, and has a period of incubation of from one to twenty days. Recognised three forms: Scarlatina simplex, scarlatina anginosa, and scarlatina maligna. Although liable to complications with certain parts of the system suffering more than others, yet it is a general disease, and should be treated as such. From our want of knowledge of its pathology, our treatment must be for the most part empirical; the former heroic treatment was death to the patient, and even at the present day our treatment is very unsatisfactory. We should follow as nearly as possible the indications of nature, give the patient plenty of fresh air and water, sponge the surface with diluents, etc., etc. Had tried everything for the throat affection, and could not say that he had seen benefit in any case. For the glandular swellings of the neck applies fat salt pork externally. He treats adults with tonics and stimulants, and the best of the latter is "brown stout," also uses yeast.

Dr. S. P. White mentioned that while attending a case of scarlatina, eleven years since, he was attacked with profuse salivation and sore throat. Inquired if others had experienced anything of the kind while attending cases of contagious disease.

Dr. Hubbard had never seen a recovery after convulsions occurring subsequent to the appearance of the eruption. He treated the anasarca following scarlatina with belladonna and colchicum.

Dr. Isaac E. Taylor had seen records of eight or nine cases of scarlatina after parturition that had died. Verified Dr. Hubbard's remarks respecting convulsions complicating the disease; thought cases of general anasarca very critical. Related two or three extreme cases in which the eruption was slight, and one having purpura hemorrhagica severely. Was favorable to the use of belladonna as a prophylactic; had seen many instances where it seemed to prevent the disease, and although he had not great confidence in it, could not reject it.

Dr. Isaac Wood was glad to hear the remarks of Dr. Taylor upon belladonna. Although it was true his own doses of this remedy had been moderate, his experience was adverse to the opinion that it possessed preventive powers. Still he would generally give it, for the reason expressed by the former speaker.

The subject of scarlatina was continued to the next meeting, and the section adjourned.

◆

Cæsarean Operation.—Professor Gogefroy describes a successful case of Cæsarean operation lately performed by him. He has operated four times, and this is his first successful case. He attributes the recovery to the early period of the operation. The advantages of operating early—if possible, before the rupture of the membranes—are great. The incision into the uterus is, in such a case, much diminished by the contraction of the uterus; in this case, for example, it contracted from about ten to five *centimètres*. Besides injury to the womb and bladder, the consequence of prolonged labor is thereby prevented. The practice, the professor adds, of three nations illustrates this point. The Germans, who operate early, save many females; the French, who delay, save fewer patients; and the English, who only operate *in extremis*, lose almost all their patients. —*Brit. Med. Jour.*

Progress of Medical Science.

PREPARED BY DR. P. F. C. DESLANDES.

REGENERATION OF BONE.

The cases of regeneration of bones from the preserved periosteum, after necrosis, multiply on all sides; and from various quarters, surgeons send cases to the Academy of Sciences, Paris. M. Lamare Piquot announces that he will, in a few days, present a young man walking without crutches, from whom he removed a considerable portion of the tibia. M. Flourens has seen the patient, and deposited on the desk the sequestrum removed.

In a letter addressed to the President of the Academy on the same subject, M. Sedillot spoke thus: "The question of osseous regeneration, carried by a natural progress from the domain of experimental physiology to clinical application, requires, above all, clear cases, and it is the duty of surgeons to add to their number and variety, in order to extend the limits of art, and to realize the magnificent programme of the celebrated Perpetual Secretary of the Academy. No one doubts the facility of osseous regeneration following necrosis, but all the pathological conditions are not yet perfectly known. In several of my communications to the Academy I have purposed to show that the regeneration of bone was wanting in those points where the periosteum had been attacked with suppurative inflammation; and I have thus explained the formation of the cloacæ and losses of substance met with on the bones of new formation. Such facts prove the danger of dissecting the periosteum and detaching it from the surface of the bone, since suppuration, almost unavoidable, comes to impede the reproduction of the bone, by converting into pus globules, the embryonic cells whose osteoplastic transformation is arrested until the reconstitution of the periosteal membrane."

From a case of necrosis of the femur which he relates, M. Sedillot thinks he ought to draw the following conclusions:

"1st. Superiority of operations saving the relations of the periosteum with the subjacent osseous layers.

"2d. Condemnation of the methods in which the periosteum is dissected and isolated from the osseous surfaces in contact.

"3d. Failure of the attempts at regeneration of bone from the periosteum detached from the splinters in the seat of fractures.

"4th. Absence of osseous reproduction from the fringe of periosteum preserved around amputated bones.

"5th. Absence of osseous regeneration in cases of pseudarthrosis treated by resection with preservation of a periostic sheath.

"6th. Failure of the regeneration of bone from pieces of periosteum isolated and preserved in the wound following the resection of bones."

VACCINATION OF NEW-BORN INFANTS.

M. E. Barthez read, at a recent meeting of the Société Medicale des Hôpitaux de Paris, a memoir on the vaccination of new-born children. The question to be discussed was, *Is it proper to vaccinate infants a few days after birth?* This question is not new. It is one of the first which must have been asked in the practice of vaccination. It is in fact considered at length in the classical works which treat of that subject, and particularly in the works of M. Bousquet. According to this writer, one could not vaccinate too soon. However, this rule with him is obligatory only during an epidemic. Beyond this, says he, there is no inconvenience to postpone the vaccination until the second or third month, statistics showing that the small-pox is very rare before the sixth month. He considers three months as the best time for vaccination. It is the practice most generally adopted. However, the peculiar conditions in which children born in hospitals are placed, their being exposed more than anywhere else to contract variola, has induced some physicians to modify in this respect the general practice, and to vaccinate these children the first few days after birth. These early vaccinations have produced in some children accidents more or less serious, and in some cases even fatal.

M. Barthez, as inspector of the service of the verification of deaths, having had the opportunity of ascertaining several cases of death which could not be referred to any other cause but to the consequences of vaccination practised during the first few days after birth, has brought the question before the Société Médicale des Hôpitaux. The following are two of the cases which have led him to make this communication:

Case I.—A little girl, born in perfect health, was vaccinated the second day after birth, and left the hospital on the ninth day. At this time the vaccine was in a good condition, the child seemed well, except a few small pimples on the face, which were considered as of no importance. On the twelfth day of the age of the child (the tenth of the vaccination) some fever supervened, the pimples increased; the child grew weak and nursed with difficulty, then after alternations in the intensity of the fever, the pimples of the face disappeared. Some swelling with redness made its appearance on the nates, and the child failed visibly. Meanwhile the vaccine followed its course, it was very beautifully marked, and when the child died on the twenty-fourth day of life (the twenty-second of the vaccination) the scab was still adherent.

The mother, comparing the course of the vaccine in her daughter and in her other children who had been vaccinated when older, and in whom the pustules had been much less inflamed, and had recovered more easily, did not fail to mark the difference.

Case II.—Called upon to certify to the death of a child, nineteen days old, M. Barthez learned that this child had been vaccinated on the second day after his birth, and that this operation had been followed by the development of symptoms under which the child soon succumbed. Nothing in the examination of the child seemed to him of a nature to invalidate this interpretation of the causes of the death of this child.

The report of these cases before the members of the Society, and the questions they have suggested, elicited, from some members, explanations, which we think necessary to reproduce for the elucidation of this interesting point of medical practice. We borrow the relation from the *comptes rendus* of the meetings of that society.

M. Legroux vaccinates all the newborn of his service, since he has been informed that the children born in the Hospital are soon attacked with small-pox when they are taken to the *crèches*. He began vaccinating, like everybody, by making three punctures on each arm; but it happened pretty often that little children, only a few days old, had around the vaccinal pustules a most violent inflammation; he combated this inflammation by emollient cataplasms. In order to avoid this violent inflammation, he successively reduced the number of the punctures; instead of three he made only two. Still he had some inflammatory symptoms; he thought by reducing again the punctures, to avoid entirely any accident. He has succeeded. Since he makes only one puncture on each arm, he has never seen any accident which might be imputed to vaccination. Therefore he considers early vaccination, that is, vaccination practised the second day after birth, as dangerous only from the too great number of pustules, and by limiting vaccination to one inoculation on each arm, there is not any danger to be apprehended.

M. Béhier is for early vaccination; he vaccinates the children of his service the second day after birth, and he affirms that he never saw any accident supervene. He has seen, on the contrary, children who had not been vaccinated attacked with erysipelas, and die.

M. Blache, formerly an advocate of early vaccination, had all the children of his service vaccinated the first days of their life, but he had cause to regret it, having observed numerous accidents, violent inflammations, deep ulcerations, sometimes also, but more seldom, erysipelas. To-day he has made it a law not to vaccinate during the first days of life.

Lastly M. Hervieux observed that at the *Hospice des enfants trouvés* (Foundlings' Hospital) vaccination becomes sometimes indirectly a cause of death by retarding the departure, for the country, of children who are kept in the *crèche* during the evolution of the vaccine. Of course the alimentation in the *crèche* is insufficient; the children fail, fall sick, and at last die. This would not have taken place had they been sent to the country and entrusted to a good nurse.

A committee has been appointed to report on this question.

American Medical Times.

SATURDAY, NOVEMBER 16, 1861.

OUR STATUS ABROAD.

An American, it has often been remarked, is decidedly cosmopolitan in his sympathies. He refuses all restraints in his intercourse with the world, whether in trade, in science, or in literature. This feeling not only leads him to seek freely for whatever may interest or gratify him wherever it may be found, whether at home or abroad, but it tends to make him acknowledge unreservedly the source from which it is obtained. To what these national peculiarities are due it is not easy to decide, though we may surmise, that as the American people is a melange of all the nations of the earth, there exists among all ranks and conditions of society a filial affection for the older countries.

What is true of the American people in this general sense, is also true of the medical profession. We are accustomed to seek knowledge in every quarter of the globe, and are quite as much rejoiced to learn the discovery of a new principle in medical science if the discoverer be an Englishman, Frenchman, or German, as if he were our next door neighbor, and "a true American." It is alleged, indeed, that we are so accustomed to look to other countries for our medical knowledge, that we do not advance medical studies at home, that we have no national medical literature, and never can have, until we exchange our free trade policy for protection. However that may be, it is nevertheless true, that the general and rapid diffusion of information in the profession, gathered from all sources, must create a constantly increasing demand for an improved medical literature, and gradually elevate the tone of public medical sentiment. This trait in our character has been attributed to our weakness, to our want of resources, and the like; but such is not the true explanation. It is rather, as already intimated, an inherent national peculiarity, growing out of the make-up of our people. It is an admirable trait, and one of which we may well be proud. While Englishmen discard everything French, and the French everything English, and the Germans reject Anglo-French ideas, and all distrust the "Yankee Nation," the American physician, as a member of the Republic of Medicine, accepts, in full faith and confidence, whatever new and useful is communicated to him by one of his fraternity.

While we pursue this liberal policy out of the most generous regard for the rights of others, and the interests of medicine, it accords little with our sense of justice to find cases published by American physicians, styled by foreign journals "American Stories," and repudiated because related by an American. The *Dublin Medical Press* copies the case of "Wound of the Brain," by Dr. Willson of Mich., published in the number of this journal for Sept. 14, and in the following remarks discloses the fact that cases related by American physicians are always received in doubt, however well authenticated:—

> "In another part of our impression, we copy an interesting and instructive case of 'Wound of the Brain,' which, we doubt not, will be condemned by some of our readers as an 'American Story.' We offer no apology for reprinting it, because we find it published in a respectable journal and coming from a reliable source; but we take this opportunity to deprecate the habit of discrediting facts coming from the other side of the Atlantic, and authenticated with such names as Hamilton, Flint, etc., though they are often more credible than the 'marvellous statistics' and 'dazzling discoveries' of surgeons nearer home, and far more to be depended on than the flood of Continental marvels and German theories which are every day accepted as incontrovertible. The unenviable character which Brother Jonathan has acquired for the publication of exaggerated facts and strained conclusions, should not be applied to all cases."

It cannot be denied that American physicians have reported a full share of extraordinary cases; but many of them have been remarkable only because they were the first of the kind placed on record. We may instance McDowell's case of ovariotomy; Mott's cases of ligature of the arteria innominata, of the common iliac, and of exsection of the clavicle; the case of Alexis St. Martin, with a fistula opening into the stomach; and finally, the case of Gage, who had a bar of iron driven through his head, but recovered. These were all very remarkable cases, and were probably at first pronounced "American Stories," but who now denies the accuracy of the reports? McDowell's name, with universal consent, is recorded among the first ovariotomists; Mott still lives to vindicate the correctness of the many extraordinary cases which he has published. Every text-book on physiology attests the importance of the investigations into digestion conducted through the fistula in St. Martin's stomach; and finally, the patient still survives through whose head a tamping-rod (three feet seven inches long) was projected from base to apex, as do many reliable witnesses to the accident.

It is undoubtedly true that cases can be cited where American physicians have made exaggerated statements, but it is altogether unjust to infer from this circumstance that the profession of this country is thereby rendered obnoxious to the charge of publishing "exaggerated facts and strained conclusions." We believe our current medical literature, so far as relates to a conscientious regard to accuracy of detail, will not suffer in comparison with that of any other country. The *Medical Press*, with the liberality characteristic of its nation, does us but simple justice in this particular.

But aside from this grievance, the American medical profession have another cause of complaint against their foreign brethren. Not only do the latter too often discredit the statements of our writers, but they not infrequently seize upon important discoveries in practical medicine, first made among us, and without due acknowledgment of their indebtedness, introduce them to their countrymen as their own inventions. We could mention several instances in illustration; we will give but a single example. The method of reducing dislocations at the hip-joint by manipulation, no sane medical man who has any knowledge of his profession will deny was introduced into practice, and completely illustrated by Dr. Reid of Rochester, N. Y., (U.S.A.) This method of reducing dislocations was never alluded to by any foreign journal that we receive, until the full details were republished in one of the English semi-annuals. Several weeks after its appearance, a London journal announced that a surgeon of one of the hospitals of that city had discovered a method of reducing dislocations at the hip-joint by simple manipulation, and had succeeded perfectly in three instances. The details of the method were given, and they were precisely those published by Reid. No allusion whatever was made to Reid by way of acknowledgment; the surgeon's name was immediately prefixed to the method; reporters and editors extolled the ingenuity of the operator; and to this time it is familiarly referred to as this surgeon's method of reducing dislocations of the thigh.

We deprecate this spirit, and regard it as inconsistent with the liberal and fraternal feeling which should pervade all ranks of a learned profession. Medicine, cultivated as a science, aims by innumerable influences to unite its members in a universal brotherhood. And that fraternity is one of perfect equality.

THE WEEK.

At the Anniversary Meeting of the New York County Medical Society held at the College of Physicians and Surgeons, Twenty-third street, on Monday, the 11th inst., the following were chosen officers for the ensuing year:— President, H. D. Bulkley, M.D.; Vice-President, Alfred Underhill, M.D.; Treasurer, B. R. Robson, M.D.; Corresponding Secretary, S. A. Purdy, M.D.; Recording Secretary, H. S. Downs, M.D.; Censors, T. C. Finnell, M.D., S. T. Hubbard, M.D., J. O. Pond, M.D., C. Herschel, M.D., W. N. Blakeman, M.D. We are happy to see that more interest is being felt by the profession in this time-honored institution, and trust that, under the fresh stimulus it is receiving from this interest, it will contribute a liberal share towards the advancement of medical science in our city, and the promotion of pleasant and profitable social intercourse. An adjourned anniversary meeting will be held on Tuesday next, 19th inst., for the purpose of revising the By-laws of the Society, and transacting other business left unfinished at the late meeting. We have taken the opportunity, on a former occasion, to express our best wishes for the success of those who are endeavoring to restore to usefulness an association which has been suffered to remain in a dormant state for too long a period.

The English are about to honor the memory of one of their most distinguished philanthropists, recently deceased, by the establishment of a Convalescence Hospital bearing his name. Lord Herbert was one of that rare class of men, who, though moving in the higher circles of society, devoted the best energies of his life to philanthropic duties. He labored earnestly to improve the sanitary condition of the army, and to promote the education of its medical staff. No more fitting monument can be raised to his memory, than an institution devoted to those purposes which he labored so diligently to accomplish.

A **Medical School** in Mexico is described by Dr. **Carman**, in the San Francisco *Medical Press*, as follows:—

> "The school at Guadalajara has seven Professors, natives of Mexico, five of whom are graduates of the Parisian School of Medicine; the Faculty is composed of men of superior intelligence, and are capable of reflecting credit on their profession in any part of the world. The college building is a stately edifice, and in connexion with it there is one of the most extensive hospitals on this continent. The hospital building is large and well ventilated, and is capable of accommodating, in a comfortable manner, near 3000 patients. This is nearly equal to the celebrated hospital of Vienna. Dr. **Carman** reports that there are some 500 sick, at present, in the hospital, and that everything is finely arranged for the benefit of the patients, every department bearing the marks of perfect order and system, so much so, that a visit to the institution is in the highest degree gratifying to a medical man. The hospital building was erected during the latter part of the last century by the Spaniards, but recently it has been renovated and enlarged, and greatly improved in its internal arrangement. It is in charge of Dr. **Pablo Gutierrez**, together with Drs. **Rafael Jimenes Castro** and **Ramon Ochoa**. Dr. **Pablo Gutierrez** is Surgeon-in-Chief to the Institution; he is a gentleman of fine medical attainments, and as an operative surgeon he enjoys a deservedly high reputation: his colleagues, who are Professors in the Medical Institution, are men of eminently superior medical education, and their skill as practitioners is fully verified by the high esteem and appreciation with which they are regarded by the public."

The Brooklyn Medico-Chirurgical Society gave its anniversary dinner on the evening of the 11th inst., at the Pierrepont House. The President of the Society, Dr. **Daniel Ayres**, presided, and about sixty gentlemen sat down to the table. After the cloth was removed speeches were made by Dr. **Bauer**, Rev. Dr. **Guion**, Drs. **Homiston**, **McPhail**, **Ayres**, **Sayre**, and others. This society exhibits great activity. During the past year it has regularly published its transactions, which consist of carefully reported cases, discussions, papers on practical subjects, and elaborate reports.

Reviews.

Hints on the Preservation of Health in Armies. *For the Use of Volunteer Officers and Soldiers.* By **John Ordronaux**, M.D., *Professor of Medical Jurisprudence in Columbia College, New York.* New York: D. Appleton & Company, 1861. pp. 142.

Rules for Preserving the Health of the Soldier. *Document of the U. S. Sanitary Commission.*

It is now generally admitted that successful warfare in all great campaigns is quite as much a problem of sanitary science as of military strategy. As the effective *instrument* of successful strategy in war the soldier must be physically competent to his task. Hence patriotism and philanthropy unite in giving these "Hints" and "Rules" for preserving the health of the army.

Prof. **Ordronaux** performed a patriotic duty in preparing for the press his "Hints" previous to his departure across the Atlantic. Manifestly written *con amore*, and for the special benefit of the officers of the volunteer army, the work is admirably adapted to its object. It is written in an attractive style, and deals with the more important questions in Military Hygiene in a most satisfactory and practical way.

The only criticism we have heard concerning this little book is that a single classical quotation remains untranslated. But when, a few days ago, we found an humble private—*a graduate of Harvard*—perusing and commending these pages, and when in another regiment a captain informed us, that forty members of his company hailed from a single collegiate institution, and that these young men insisted upon informing themselves upon all questions affecting the strength and movements of armies, it appeared fortunate that this "hornbook" is in a style to be appreciated by such soldiers.

The "Hints" are arranged under the following heads:—1. *The Formation of Armies;* 2. *The Examination of Recruits;* 3. *Their Education;* 4. *Construction and Hygiene of Barracks;* 5. *The March;* 6. *The Camp;* 7. *Food and Cooks;* 8. *Clothing;* 9. *Prevention of Disease—Hygiene;* 10. *Hospitals and the Care of the Sick.*

We quote a few passages:—

> "It seems to be hardly known outside of armies that the proportion of their mortality, under the most favorable circumstances, is *twice* that of civil life, although in this latter so many patent causes of disease manifest themselves as would make us infer differently. That this mortality is reducible to a ratio at least equal to that of civil life, is not to be questioned; for we see it already so foreshadowed in the less percentage observable among old soldiers, who, without any additional safeguards to health beyond those possessed by their younger brethren, are yet from *habit* and induration protected from those lurking morbific agencies which decimate the latter; and if so reducible, then it is the duty of the state to prevent it, because preventable mortality is criminal mortality, and the responsibility for its occurrence rests at the door of those through whose negligence it has happened."

The hints concerning food and cooks are good:

> "How the food is cooked, or whether it is cooked at all, is apparently a matter of perfect indifference to all in authority. The inconsistency manifested by such conduct is little short of criminal, for it is in every sense a neglect of one of the most efficient means for preserving the health of armies. In any other of the details of military service no similar degree of negligence would be tolerated. . . . Now some similar degree of vigilance is precisely what is needed in the culinary department of armies. We need, and we must have, educated army cooks, in order to prevent disease, waste of food, and to extract the best possible good from it. . . . Every company should have one *educated cook*, whose duty it should be to attend to nothing but the kitchen."

Generally the hints on the subject of clothing, tenting, hutting, camp police, guard duty, drill, and rest, are admirably given, and are adapted to pave the way for the favorable reception of suggestions from the medical to the field officers. The book is not designed as a substitute for the military surgeon's daily counsels.

The little handbook of "*Rules for Preserving the Health of the Soldier*," like most of the issues from the **Sanitary Commission**, is designed to afford instant directions concerning the sanitary wants to which the soldier is daily exposed. In forty-two brief sections, each of which may be committed to memory upon the first reading, the recruit is warned what to avoid, and advised what to do for the protection of health.

Concerning these Rules the Commissioners state—

> "They are derived from the highest authority and the largest experience of military and medical men, and it is believed that, if followed with the intelligence and honesty of purpose which characterize the American soldier, they will save the lives of thousands of brave men who would be otherwise lost to the service of their country.
>
> "They are addressed alike to officers and privates, inasmuch as the latter are liable to promotion, and upon their officers devolves the responsibility of securing their health, safety, and comfort. They will be found in no instance to conflict with the

'Army Regulations,' by which all ranks are governed, and with which every good soldier should be familiar."

We quote the following as specimens of these excellent "Rules," which are happily derived in great measure from the Army Regulations:

"Each company should have its regularly detailed cook and assistant, who should always, on a march, be allowed to ride in one of the wagons, when practicable, inasmuch as their services are more necessary for the health of the men than in the ranks, and they are often required to cook at night the rations for the next day, whilst the men are sleeping. The men should always willingly procure wood and water for the cooks, whether detailed for such service or otherwise.

"'Bread and soup are the great items of a soldier's diet in every situation: to make them well is therefore an essential part of his instruction. Those great scourges of a camp life, the scurvy and diarrhœa, more frequently result from a want of skill in cooking than from the badness of the ration, or from any other cause whatever. Officers in command, and more immediately regimental officers, will therefore give a strict attention to this vital branch of interior economy.' (Winfield Scott.)"

"It is wise and prudent, when ague and fevers are prevalent, that every man should take a dose of quinine bitters at least once in twenty-four hours. This will surely serve as a safeguard against an attack of disease; it has been practised in Florida and elsewhere with undoubted benefit.

"The men should not be over-drilled. It is likely to beget disgust for drill, and to defeat its object. Three drills a day, of one hour each, for squads, and a proportionate length of time, when sufficiently advanced, for battalion drill, is more profitable than double the time similarly occupied.

"When practicable, amusements, sports, and gymnastic exercises should be favored amongst the men, such as running, leaping, wrestling, fencing, bayonet exercise, cricket, base-ball, foot-ball, quoits, &c., &c.

* * * * *

"The commencement of the day's march should be prompt. Nothing tires the men so much as hanging around a camp, waiting for the word to start."

An army already numbering nearly half a million of intelligent reading men furnishes an interesting field for the operation of *hints* and *rules* for sanitary protection and improvement, and we would suggest that when Prof. Ordronaux returns from Europe he should revise and enlarge his little handbook, adding some practical suggestions from his observation of military hospitals, the training of ambulance corps, etc., on the continent. The Army Sanitary Commission, if it had the necessary pecuniary resources, might do a good service by placing Prof. Ordronaux's little work in the hands of every officer in the Army. The Commission's *Rules of Health* are given to every soldier in the ranks, where they will be of inestimable value. Among the thirty-two documents already issued by the Commission, we find properly accredited and indorsed a re-publication of the N. Y. Academy Report on *Military Surgery and Hygiene*, and the Crimean Sanitary Commission's *Suggestions of Sanitary Considerations in the Selection of Encampments*. And a manual is in press on *Camp Cooking*. Such is the practical good sense of that Commission.

Recent Inventions.

STEARNS'S ARTERY CLAMP.

Dr. C. W. Stearns, Surgeon of the 3d regiment New York Volunteers, has lately contrived a new instrument for arresting arterial hemorrhage, especially where the bleeding vessel is too deeply seated to be conveniently secured by ligature. And some eminent surgeons of New York think that it may also be used with advantage in operations generally, where there may be any great difficulty in tying by the common method, as its use would save time and loss of blood. The instrument resembles a slender pair of dentists' forceps, in the beak or jaws of which are two short grooves, as seen in figure 2. These grooves are designed to hold little horse-shoe shaped clamps, of any convenient size *c' c'' c'''*. The clamps are made of annealed or passive iron wire (gauge, 15, 16, or 17). Between the handles of the forceps there is a spring, *s s'* (Fig. 1), the action of which is to draw the handles together, and so prevent the clamp from falling out of its place, without the necessity of constant pressure on the handles by the hand of the operator. The forceps with a wire clamp in its jaws (Fig. 1) is ready for use; and may be applied instantaneously to a bleeding vessel. *First*, by simply thrusting the points of the clamp astride of the open mouth of the artery, and *then* compressing the handles of the forceps with a *moderate* force, the artery thus becomes securely gripped between the points of the wire clamp. Then by expanding the handles of the forceps, the wire clamp (as seen in *C*) is left tightly clinging to the closed mouth of the artery. The annealed iron wire, used for the clamps, is wholly devoid of elasticity, and makes what would be called in mechanical phrase, a "dead pinch" on any substance on which it is compressed. Dentists and jewellers make frequent use of this sort of wire clamp to hold their work together while soldering under the blow-pipe. These clamps, therefore, have no resemblance to the "serrefines" or to Liston's elastic figure-8-shaped wire instruments.

Fig 1

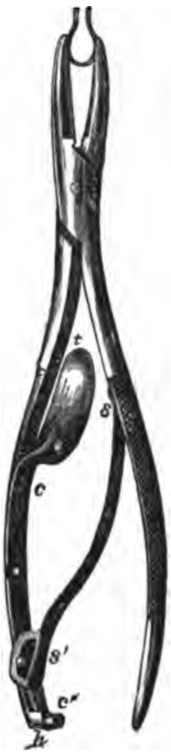
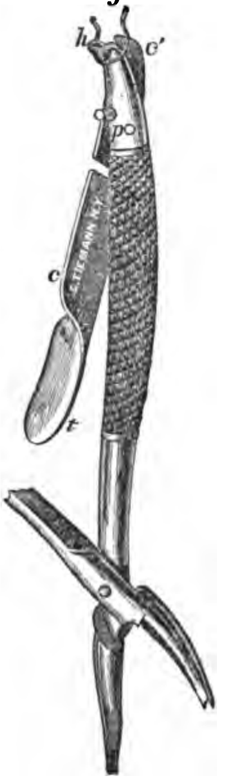
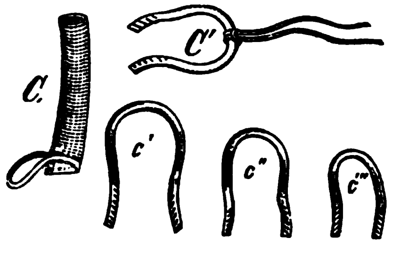


Fig.2





To the inside of one of the handles of the forceps (as seen in Fig. 2), is added a contrivance for *removing* the clamp when necessary. It is a lever, *c c′*, moving on a pivot, *p*, with a thumb-piece, *t*, at one end, and a blunt hook, *h*, paired with a similar blunt hook at the end of the handle, and which, when closed, may be hooked within the loop of the clamp, and then by pressure on the thumb-piece, *t*, the two hooks separate and force open the clamp, so that it loses its hold on the flesh, and can be drawn away. Surgeons can in a few minutes accustom themselves to the use of this instrument, by compressing the clamps on the fold of skin between the thumb and forefinger of the left hand; or by practising upon a bit of small-sized rubber tubing; or, what is better still, by partially clenching the left hand, so as to form a conical hollow, and then taking the forceps, armed with a clamp, in the right hand, pass it down deep into the hollow of the left, so as to press strongly against the skin over the metacarpal bone of the little finger, and compress the handles of the forceps, until the clamp is felt to bite or pinch pretty smartly, then, by expanding the handles, the instrument is detached, and the clamp is left, clinging firmly to a fold of the palmar skin, as will be seen on opening the hand. Closing the hand again, the process of removing the clamp may be practised. To take off the clamp, unhook the end of the spring at *s′*, and separate the handles as widely as they can be; then that handle with the thumb lever may be passed down into the hollow of the hand, and the blunt hooks made to enter the loop of the adhering clamp, with moderate pressure on the thumb-piece the hooks separate, thus force open the clamp, so that it can be withdrawn. The instruments, as made by Messrs. Tiemann & Co., are of two sizes, the larger for the operating case, and a smaller size for the pocket-case.

Correspondence.

TREATMENT OF FISSURES OF THE ANUS BY LACERATION.

[To the Editor of the American Medical Times.]

Sir:—I have long suffered from two fissures of the anus, the pain of which, on having a stool, has been excessive, and almost intolerable. I have had to give expression to my agony in screams. The application of the nitrate of silver was tried by one of our practitioners, and another made an incision; but these plans failed to give me any relief. I finally applied to Dr. Gurdon Buck, of New York, and his method of cure was so simple and effectual, and yet novel to us, that I shall but do by duty to the profession in making this notice of it.

After fully etherizing me, the bowel became quite relaxed, and he then introduced his two forefingers into the gut, and by stretching it sufficiently, tore the fissures open from the extremity of the anus to the upper edge of the sphincter muscle, and the operation was completed. This is the account I had of it from an assistant. It was a perfect success; the terrible pain which reduced me so much has not returned. The wounds healed soon, and I have had no further difficulty since, but have been careful to use an enema of warm water and soap-suds, whenever I became costive. Yours, &c.

James Law, M.D.

Tarry Town, Oct. 19.

THE TREATMENT OF FRACTURES IN NEW YORK HOSPITALS.

[To the Editor of the American Medical Times.]

Sir:—In a letter from Dr. Swan to your Journal, dated Paris, Sept. 6, 1861, is the following paragraph, on which you will allow me to comment.

"I will venture to say, that there are more of the old clumsy fracture apparatus now used in the three New York Hospitals than in all the sixty-two like institutions in Paris."

Speaking for the New York Hospital, it may be asserted that the writer is not at all familiar with the treatment of fractures in this Institution. It has always been the aim of the surgeons to secure simplicity in apparatus, and a good result in treatment. Fractures of the thigh have been treated in a manner which has called forth the unqualified approbation of foreign and home surgeons. It was here, it is believed, that the adhesive plaster extension, suggested by Dr. Crosby, was first extensively used. During the past year, Dr. Buck has suggested the weight and pulley apparatus, dispensing altogether with the long side splints. This apparatus has now been used in all the cases treated here for some seven or eight months, the number amounting to about forty, and with results that invite comparison. It is not thought that a more simple and suitable apparatus is in use in any institution, even in Paris. The *apparatus immobile*, or starch bandage, has been used in this hospital for a number of years; and for a few months back, another variety, the plaster of Paris bandage, has been used. The greatest possible interest is taken in the treatment of fractures by the attending surgeons, and the residents, and none of them "revere antiquities." On the contrary, they are constantly on the alert to learn something new and good, the latter adjective being always considered essential. It is possible that the writer has not visited the New York Hospitals, of which there are considerably more than "*three*," as thoroughly as he has those of Paris.

Yours, etc.,
D. B. St. John Roosa, M.D.,
Resident Surgeon, N. Y. Hospital.

VERMONT MEDICAL SOCIETY.

[To the Editor of the American Medical Times.]

This society held its annual meeting in the State House on the 16th and 17th ult.

In the absence of the President, the meeting was called to order by the Secretary, Dr. McCollom of Woodstock, and Dr. Stiles of Windsor was appointed President pro tem.

The record of the semi-annual meeting having been read and approved, and a committee appointed to examine candidates for membership, the following gentlemen were elected members:—Dr. Charles S. Downs, Topsham; Dr. E. F. Upham, West Randolph; Dr. M. J. Hyde, Isle La Motte; Dr. C. F. Hawley, Fairfax; Dr. J. E. Macomber, Worcester; Dr. E. S. Blanchard, Hyde Park; Dr. G. W. Hunt, New Haven.

The officers elected for the coming year, were:—

President.—A. T. Woodward, Brandon; *Vice-President.*—H. S. Brown, St. Johnsbury.

Recording Secretary.—Wm. McCollom, Woodstock; *Corresponding Secretary.*—C. B. Chandler, Montpelier; *Treasurer.*—Charles Clark, Montpelier.

Committee on Printing.—H. S. Stevens, St. Albans; Joseph Perkins, Castleton; J. N. Stiles, Windsor.

Business Committee.—J. N. Stiles, Joseph Perkins, E. Hazen.

Delegates to Castleton Medical College.—J. N. Stiles, H. S. Brown.

Delegates to Burlington Medical College.—M. Love, Bennington; W. H. H. Richardson, Montpelier.

Dr. Morgan of Pownal, Dr. Chandler of St. Albans, and Dr. Richardson of Montpelier, were constituted a committee to confer with the Executive in reference to the appointment of a Medical Board for the examination of candidates for surgery in volunteer regiments.

Instruments of new construction were exhibited by Dr. Bradford of Northfield, also by Dr. Branch of St. Albans.

Dr. Keith presented a paper on retention of placenta, which elicited much interesting discussion from Drs. Stevens, Woodward, Stiles, Bradford, and others.

Dr. Brush read a paper upon diphtheria, and cases were reported by many of the members. Four or five hours were devoted to the discussion of this disease, Drs. Woodward, Marsh, Keith, Hazen, McCollom, Bradford, and others participating. Drs. Woodward and Bradford strongly advocated the use of calomel in the treatment of this disease, which doctrine was strenuously opposed by nearly every member present.

A committee were appointed to investigate and report upon this subject at the next semi-annual meeting.

This meeting was one of unusual interest, the attendance greater than has been known for years, and a spirit of investigation exhibited, and zeal awakened, that will accompany members to their respective fields of practice, and result in much good to the communities upon which are bestowed the labors of this self-denying class of men.

The semi-annual meeting will be held in St. Albans, on Wednesday and Thursday following the commencement of the medical colleges in June next.

W. McC.

Army Medical Intelligence.

Brigade Surgeons.—The following recent appointments have been made:—Z. F. Azpell, S. S. Cox, James G. Grant, C. B. Chapman, J C. Kennon, Wm. H. Mussey, C. W. Jones, George Burr, W. M. Chamberlain, Robert Raskoton, S. L. Panocoast, Nathaniel R. Mosely, and F. H. Gross.

MEDICAL STATISTICS AT FORT MONROE, VA.

[Army Correspondence of the American Medical Times.]

The returns for September, 1861, of the medical officers of this division of the army show a diminution in the number of cases of disease; a marked increase has occurred, however, in the number of cases of fevers. This sanitary advance is in a great degree owing to the improved knowledge of the men in the art of taking care of themselves, brought about by experience; also to the fact that all the regiments, even the lately arrived ones in this department, are furnished with floorings to their tents.

Some substantial preventive of dampness in the tents, especially at night, is very important to the well-being of the soldiers. In view of the fact that in some parts of the seat of war lumber cannot be readily or speedily had, and that everywhere delay must occur in the furnishing of flooring, after its want being made known, it has been recommended that each regiment starting for the field should supply itself in advance with the necessary requisites for this purpose. The summary of the reports shows the following facts:

Strength of command, officers and enlisted men, Oct. 1, 1861.*	6,532
Remaining sick and convalescent, at last report	430
Taken sick during the month of September	2,045
Sent to the General Hospital, Fort Monroe	27
On furlough, 6; Deserted, 1	7
Discharged on Surgeon's certificate	8
Died, 7; remaining sick, 162; convalescent, 258; total remaining	420
Returned to duty	2,006

The causes of death were:—Meningitis, 1, private Edward J. Collier, Mass. Battalion; fever remittent, 1, corporal Wm. H. Annabel, Union Coast Guard; fever typhoid, 2, private Martin S. Pinkham, Mass. Bat., private Julius Cohnheim, 20th N. Y. V.; traumatic tetanus, 1, private Chas. Hablitz, 1st N. Y. V.; drowned, 1, private Wm. McDonald, Union Coast Guard; gunshot wound, 1, private Andrew J. Sproul, 16th Mass. Vols.;—total 7.

Classes of Disease.

Fevers	434
Diseases of organs connected with digestive system	709
Diseases of respiratory system	210
" " brain and nervous system	123
" " urinary and genital organs, and venereal affections	35
" " fibrous and muscular structures	135
Abscesses and ulcers	103
Wounds and injuries	114
Diseases of the eye	19
Diseases of the ear	34

Leading diseases:—Diarrhœa, 384; rheumatism, acute and chronic, 119; constipation, 114; fevers—congestive, 44; common continued, 11; intermittent quotidian, 120; fever intermittent tertian, 9; fever remittent, 195; fever typhoid, 5; other diseases of the class of fevers, 50; dyspepsia, 29; colic, 41; cholera morbus, 10; gastritis, 4; tonsillitis, 17; bronchitis, 84; phthisis pulmonis, 8; pneumonia, 1; pleurisy, 4; catarrhus, 94; cephalalgia, 98; ictus solis, 1; syphilis primitive, 3; syphilis consecutive, 9; orchitis, 11; gonorrhœa, 8; abscesses, 15; phlegmon, 46; incised, contused, and lacerated wounds, 36; gunshot wounds, 9; contusio, 32; debilitas, 18; ophthalmia, 17; other diseases of the eye, 2.

There are now three medical cadets serving in this division of the army. They are detailed as assistants in the General Hospital, and are efficient and useful. There is no doubt of the benefit to the army arising from the establishment of this corps.

In the General Hospital are twenty-eight of the party of released federal prisoners, who arrived here from Richmond on Oct. 7th. These were declared, on examination, to be too feeble, or otherwise unfitted, for the pursuit of their journey to Washington, and thence home. These are all suffering from the result of gunshot and shell injuries. They have improved rapidly since their arrival here; gaining in health and strength; their wounds taking on more favorable conditions. This good result is to be attributed to the relief of freedom, the better climate, improved diet, and much superior nursing and surgical attendance they have received here. They report that at Richmond the sick and wounded were always treated, so far as they could judge, as kindly and well as the resources at the command of the southern authorities and surgeons would permit. There prevails at Richmond a great scarcity of certain medicines and of surgical appliances; splints and adhesive plaster being frequently not to be obtained for cases urgently requiring their use. Instead of the latter, strips of muslin were made use of. They say, also, that the treatment of *well* prisoners was often brutal and cruel.

Charles B. White,
Fort Monroe, Va., Oct. 17, 1861. Assist. Surg. U. S. A.

NEW YORK OPHTHALMIC SCHOOL.

The Introductory to the tenth course of Lectures was delivered by Dr. M. Stephenson, at the Institution, No. 63 Third Avenue, on the 26th ult., to a large and attentive class of medical pupils and professional friends. After making some general remarks on the mechanism of that delicate and wonderful organ, the human eye, which so completely challenges our admiration, he next spoke of the importance of a thorough knowledge of Ophthalmic Medicine and Surgery.

On the subject of Specialties he observed: Gentlemen, on what I have to say on this subject, I would not for one moment have you suppose me guilty of recommending to you a partial or limited course of study. Nothing short of an entire and thorough preparation in all the various branches in medicine can make you worthy of the title to which you aspire. The history of medicine fully shows that those who have gone no further than to qualify themselves to treat a single disease or class of diseases have done little or nothing for our profession, and must ever be ranked as charlatans by the well-educated physician. No man can become a good surgeon unless he also becomes a general practitioner. How would the mere specialist understand the multifarious and often perplexing phases which diseases sometimes assume, without an accurate acquaintance with the sympathy existing between different and remote parts in the body. Suffer me then, gentlemen, to recommend you to qualify yourselves as general practitioners, if you wish to be successful specialists. At the same time let me advise you to select the department for which you are best adapted, or have the greatest partiality —for unless you have some special preference you will not be likely to be very enthusiastic in your undertaking, and without some degree of enthusiasm you will fail of success. Is it the eye, the ear, the brain, or nervous system, the skin, the heart, the lungs, or it matters not what department of medical science you select, pursue it with all the zeal and energy with which you are capable—read all the monographs you can obtain on the subject of your choice; see all the cases you can which will illustrate that particular class of diseases. If possible, connect yourself with some public Institution, by which means you will not only have an opportunity to study disease, but also watch the effects of remedies, and thereby acquire a fund of knowledge which will be of incalculable benefit in subsequent life. I am aware there is a prejudice in the profession against the mere specialist, and very justly too; the whole tribe of them should be banished from society. You must not suppose, however, that an extra attention to the study of a single organ, or class of diseases, necessarily makes one a charlatan, or even a specialist in the common acceptation of that term. The most eminent general practitioners in Great Britain, and on the Continent of Europe, men at the head of of their profession, are of this very class. What, I would ask, has given such renown to the names of Lawrence, Mackenzie, Guthrie, Vetch, Middlemore, Morgan, Travers, Tyrell, Jacob, Walker, Wardrop, Wilde, Jones, Beer, Dalrymple, Seichell, and others, but their untiring devotion to the study of diseases of the eye?

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* The reports of two regiments and two detached companies at Hatteras Inlet were too late for the condensed report, and are not contained therein.

Who has not heard of Laennec, Hope, Gooch, Ricord, Rayar, Stokes, and the late lamented Dr. Swett of New York—men who have rendered themselves eminent in their respective specialties; their writings are imperishable monuments of their talents and industry. To whom are we most indebted for the best monographs upon any one disease to which the human frame is subject? Is it not the man who has given all the energies of his mind to the investigation of some particular subject in medical science? What, again I would ask, has given such eclat to Amussat, Civiale, and Le Roy, but their almost exclusive attention to the genito-urinary organs? What else could have given them such gracefulness, dexterity, and skill in their manipulations? My advice to you, gentlemen, is to study all, and practise all branches of your profession, but endeavor to excel in some one branch or department of medical science. The truth is, art is too extensive, and life is too short for any one man to excel in all, or acquire a minute knowledge of all the departments of medicine, so extensive are their ramifications.

Clinical instruction is given every Tuesday, Thursday, and Saturday, from one to half-past two P.M., by Dr. M. Stephenson, Dr. J. P. Garrish, and Dr. M. P. Stephenson, the attending Surgeons of the New York Ophthalmic Hospital.

Medical News.

Hydrophobia.—Charles Lamb once said, that when a man was bitten by a dog, the proper thing was to shoot the man, and carefully lock up the dog and watch him to see whether there was anything the matter with him. The fate of the landlord of the Red Cow Tavern, Park-place, Mile-end-road, tragic as it is, has its ludicrous aspects when considered as an evidence of popular misapprehension. A gentleman entered his house on the 17th ult., with a large mastiff, which the landlord was admiring and patting on the head, when it suddenly snapped at him, and bit him on the inner side of the left arm. Not long after, the poor man is said to have become very violent, and shown a dislike of water. He barked like a dog several times, and imitated the crowing of a cock. He spoke in a very incoherent manner; said that Blondin was going through his feats, and that his room was wet and infested with various kinds of fish. *He seemed to be much better when informed that the dog had been killed!* Nevertheless, excitement soon came back with greater violence, insomuch that "it was necessary to have three or four persons to hold him down;" therefore a "keeper" and strait-waistcoat were sent for, but the man died before it could be put on. This was evidently not a case of hydrophobia, but of delirium tremens, brought on by fright, in a patient of highly nervous temperament. Dr. Edmunds, of Spital-square, one of the witnesses, commented upon the foolish notion that when any one had been bitten, he would become more secure by destroying the dog, and showed that if the dog could have been preserved alive and in health, all fear might have been dissipated. The popular notion, however, is firmly rooted, that if an animal who bites a man ever becomes mad afterwards, the man bitten will do so too. This proposition may agree with some old discarded doctrines about sympathy, but not with modern physiology.—*Med. Times and Gazette.*

Temperature of Melbourne (Australia).—"The mean temperature in the shade was 59·3° for March, and against 65·0° for February. The reading for the corresponding month of 1860, 58·8°. The days of the highest and lowest temperature were the 5th and 25th, on the former of which the thermometer in the shade, at 3 P.M., stood at 81·8°, and on the latter at 6 A.M., it stood at 40·1°. The greatest range of temperature (28°) was shown on the 27th, from a maximum of 69·9° to a minimum of 41·9°, and the least (6·6°) on the 11th from a maximum of 67·1° to a minimum of 60·5°. The range between the highest and the lowest of the month being 41·7°, and the mean daily range 18·07°. The mean atmospheric pressure during the month was 29·979 in. against 29·927 in. for March, and against 29·923 in. for April, 1860. The highest point reached by the barometer was 30·473 in., at 9 A.M., on the 20th, and the lowest was 29·347 in., at 6 AM.., on the 25th, the range for the month thus being 1·126 in.—*Med. Record.*

Vital Statistics of Melbourne, Australia, and Suburbs, for April, 1861.—Population 117,213; total deaths, 346. Among the causes of death, are:—Measles, 4; scarlatina, 62; whooping-cough, 9; diphtheria 5; croup, 7; diarrhœa, 26; dysentery, 15; typhus, 11; umbilical hemorrhage, 3; hydrocephalus, 7; tetanus, 2; pneumonia, 9; phthisis, 28. The relative proportions to the 346 deaths of males, and females, and children, under and over five years of age, are as follows:—Males, 178, or 51.4 per cent.; females, 168, or 48.6 per cent; children under five years, 201, or 58.1 per cent.

Woman's Hospital, Philadelphia.—This institution, which has been chartered by the Legislature of Pennsylvania, is about to be opened. The Board of Managers is composed of ladies of different religious denominations. The resident physician is Mrs. E. H. Cleveland, who has spent considerable time in the Maternité of Paris.

Death of Dr. Cusack.—James William Cusack, M.D., the distinguished Irish surgeon, died at his residence in Dublin, Sept. 25, in his 74th year.

Bad Effects of Chloroform.—Professor Simpson recently stated that the three only cases where he had seen any very bad symptoms were in one or two instances where the patients were liable to syncope.

Army Medical Board of Vermont.—Samuel W. Thayer, Jr., M.D., of Burlington, Edward E. Phelps, M.D., LL.D., of Windsor, and Selim Newell, M.D., of St. Johnsburg, compose the Board of Medical Examiners of candidates for Surgeons in the army.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861–62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture VI.

Normal Respiratory Sounds Obtained by Auscultation.—The Characters which Distinguish the Normal Vesicular Murmur.—Variations as Regards this Murmur in Different Healthy Persons.—Normal Disparity between the Two Sides of the Chest at the Summit.—Characters which Distinguish the Normal Laryngeal or Tracheal Respiration, as Compared with the Normal Vesicular Murmur.—Bronchial Respiration of Disease; its Distinctive Characters and Significance.—Broncho-Vesicular Respiration; its Distinctive Characters and Significance.—Cavernous Respiration; its Distinctive Characters as Contrasted with Bronchial Respiration.—Amphoric Respiration.

Gentlemen:—In order to be prepared to understand the signs of disease obtained by Auscultation, it is essential to know the auscultatory sounds belonging to the healthy chest. To the normal sounds, therefore, I shall first direct your attention. Limiting our attention, for the present, to the respiratory or breathing sounds, what do we hear when we listen to the chest either by the immediate application of the ear or by means of the stethoscope? Now, gentlemen, in proceeding to describe the sounds heard in health, and, subsequently, in disease, I labor under a disadvantage which I have not before felt. I cannot demonstrate these sounds to the class collectively as I have been able to demonstrate sounds obtained by percussion, and the signs obtained by inspection, mensuration, palpation, and succussion. The auscultatory sounds can only be demonstrated to members of a class, individually, by giving each an opportunity of auscultating for himself. You will recollect, however, that, in my first lecture, I endeavored to impress this point, viz. the student must have a correct mental apprehension of signs before he is qualified to verify them by observation. In treating of auscultation in the lecture room, I can only expect to lead the members of the class to obtain this preparatory knowledge. The demonstrations must be reserved for the hospital wards.

I have before me a healthy subject. Suppose you were to apply the stethoscope or the ear to some point on the chest, for example, in the left infra-clavicular region, midway between the sternum and the shoulder, what sounds would you hear during the two respiratory acts? I shall describe the sounds with a minuteness of detail which you might deem superfluous, but I assure you a familiar acquaintance with all the characters which I shall point out, is essential to a thorough mental knowledge of morbid signs.

You would hear a sound during the act of inspiration, probably continuing during the greater part or the whole of the inspiratory act, and loudest at the end of the act. This inspiratory sound is more or less intense. The intensity varies in different healthy persons, and is the least important of its distinctive characters. It has a certain pitch; it is a low pitched sound. It has a certain quality which cannot be described by words, nor can it be compared to any sound resembling it sufficiently to afford a faithful representation of it. It must be studied by listening to the chest. We will call this indescribable quality the vesicular quality, because the air vesicles are concerned in its production. These, then, are the characters belonging to the inspiratory sound in health;—a sound varying in intensity, low in pitch, and vesicular in quality.

What would you hear during the act of expiration? You might hear nothing. An expiratory sound is not always present. When it is present, it presents the following characters in contrast with those belonging to the inspiratory sound. It is much shorter, its relative duration varying in different persons between 1–5 and 1–10 of the length of the inspiratory sound. It is less intense than the sound of inspiration. It is lower in pitch than the sound of inspiration. It is devoid of the vesicular quality. It follows the inspiratory sound without any interval; in other words, it is continuous with the inspiratory sound, provided the person breathes in a natural manner, and does not (as many persons do) hold the breath after an inspiration, thus delaying the expiratory act.

These are the characters distinctive of the respiration in health. It is common to call the respiratory sound a murmur. We may, then, distinguish it as the *normal vesicular murmur*. In listening to it, in order to verify the characters just stated, the person may be requested to breathe with increased intensity, or in a forced manner, not increasing the frequency of the respiratory acts, and preserving the normal rhythm.

Now suppose that all the knowledge we have acquired by means of auscultation consisted of an acquaintance with the normal vesicular murmur; that is, suppose we had no knowledge of any morbid signs, this method of examination would be of great practical utility. It would be highly useful in a negative point of view, by enabling us to exclude all the affections occasioning the morbid modifications of this murmur, which are the signs of those affections. Finding the normal vesicular murmur existing everywhere as it does in health, we may conclude that none of the diseases which alter the murmur are present, and we shall see that the diseases which do alter it, are numerous.

Is the normal vesicular murmur uniform in all healthy persons? That it is not, has been already intimated. Its intensity varies considerably within the limits of health; the inspiratory sound is more vesicular in some persons than in others; the expiratory sound varies in length, and is sometimes present and sometimes wanting. These variations do not impair the value of auscultation, because the healthy peculiarities affect both sides of the chest, and in auscultation, as in percussion, we have no ideal standard of health, but make each person a standard to himself, by comparing the two sides of the chest.

But are the two sides of the chest exactly alike as regards the murmur? This question we must answer in the negative. If you compare the murmur carefully at the summit of the chest, in front, on the two sides, in a series of persons, you will find a disparity generally present, and more marked in some than in others. But this disparity is governed by a law which is this: on the left side the inspiratory sound is more intense, more vesicular and lower in pitch, than on the right side; and the expiratory sound is shorter, when present, and oftener absent. Conversely, on the right side the inspiratory sound is less intense, less vesicular, and higher in pitch; and the expiratory sound is longer, more frequently present, and more intense. I state these points of disparity as the results of observations made and noted in a large number of healthy persons. The statement differs from that of some writers, but as I know that my observations were made with care, and with no other object than accuracy, I must have confidence in their correctness. I will ask you to verify their correctness for yourselves. As the normal disparity at the summit is alone of importance in diagnosis, I need not stop to give the results of a comparison in other situations. It is of considerable importance to take cognisance of the normal disparity at the summit, in the diagnosis of tubercle.

Let me now describe the breathing sounds as heard in another portion of the respiratory system in health. If you place the stethoscope on the side of the larynx, or over the trachea, you will hear a sound with each act of respiration. We may distinguish this as the normal laryngeal or tracheal respiration; it is essentially the same in the larynx and trachea. What characters distinguish the normal laryngeal or tracheal respiration from the normal vesicular murmur? The inspiratory sound is more intense; this is the least important of the characters. It is higher in pitch than the inspiratory sound in the normal vesicular murmur. It has no vesicular quality, but it has a quality which we will call tubular because it resembles the sound produced by blowing through a tube. It ends a little before the end of the inspiratory act, and hence, a slight interval occurs between it and the sound of expiration. The expiratory sound is as long, or longer, than the sound of inspiration; higher in pitch and more intense than the sound of inspiration, each of these characters being the reverse of those which belong to the expiratory sound in the normal vesicular murmur.

Having made yourselves practically familiar with the distinctive characters of the normal vesicular murmur, and the normal tracheal or laryngeal respiration, you are prepared at once to understand one of the most important of the morbid signs obtained by auscultation. I refer to the bronchial respiration of disease. The bronchial respiration, or, as it is sometimes called, tubular breathing, is distinguished from the normal vesicular murmur, by the same characters precisely which distinguish the normal tracheal or laryngeal respiration. I merely recapitulate, therefore, the latter in describing the bronchial respiration. Let me place the characters of the morbid bronchial and the normal vesicular respiration, in contrast, on the blackboard.

NORMAL VESICULAR RESPIRATION.		BRONCHIAL RESPIRATION.	
Inspiration.	Low in pitch. Vesicular in quality.	*Inspiration.*	High in pitch. Tubular in quality.
Expiration.	Lower than the inspiration. Much shorter. Less intense. Continuous with the inspiration.	*Expiration.*	Higher than the inspiration. As long or longer. More intense. Separated from the inspiration by a brief interval.

What is the significance of the bronchial respiration? It is the sign of solidified lung. Whenever we obtain this modification of the respiratory sound in situations where we hear in health the normal vesicular murmur, we may infer solidification. It is at once obvious that this must be a valuable sign, for you are aware that several of the most frequent and important of the pulmonary affections involve solidification of lung. The sign is presented in pneumonia, in tuberculosis over lung condensed by compression in pleurisy, and in rarer affections, viz. carcinoma and pulmonary apoplexy.

The bronchial respiration, replacing the normal vesicular murmur, denotes solidification, but not the disease which has occasioned this physical change; yet, if we connect the knowledge which auscultation gives us concerning the situation and extent of the solidification, with certain well known laws of different diseases, we may base, with much positiveness, the diagnosis on the evidence offered by this method alone. Suppose, in a patient with some acute pulmonary affection, we find bronchial respiration extending over the greater part or the whole of one of the lower lobes, it is almost certain that pneumonia exists. Or, suppose, in a patient with a chronic pulmonary affection, we find bronchial respiration over a circumscribed space at the summit of the chest on one side, there is little room for doubt that he is tuberculous. But we derive aid in these and the other affections, from signs obtained by other methods, as well as from the symptoms

With a thorough knowledge of the distinctive characters of the bronchial respiration, you will be prepared to understand the other morbid modifications which constitute signs of disease. And here let me say that, to know these signs thoroughly, we must analyse them and resolve them into the different elements which compose them. It is not enough to say, for example, of the bronchial respiration, that it is a sound like that produced by blowing through a quill. What are its distinctive characters pertaining to intensity, pitch, quality, and rhythm? We must be able to answer this question before we understand the sign, and so of other signs.

I pass to another sign of much importance, which some find it difficult to understand at once, but which I hope to explain so as to render it clear and simple. The bronchial respiration represents lung completely or considerably solidified. Now, in certain affections the solidification is incomplete, being moderate or slight in degree, and then a pure bronchial respiration is not produced. The respiratory sound, under these circumstances, is modified, but the modification is intermediate between the bronchial respiration and the normal vesicular murmur; in other words, the characters participate of those which belong to the bronchial respiration and those belonging to the normal vesicular murmur. I, therefore, employ a term which expresses this fact. I call the sign the broncho-vesicular respiration. This term is descriptive; it means a combination of the bronchial and vesicular breathing. The respiration which I call broncho-vesicular, has generally been distinguished as rude, or rough, or harsh. These terms, as it seems to me, are indefinite, and do not correctly express the abnormal change.

According to the definition just given, the broncho-vesicular respiration embraces every degree of modification between the bronchial respiration, on the one hand, and the normal vesicular murmur, on the other hand; and the degree of modification will correspond with the degree of solidification. Suppose but little solidification exists, such as occurs in cases of a small deposit of tubercle, the broncho-vesicular modification will be slight, *i. e.* it will be but a small remove from the normal vesicular murmur. What will be its characters in such a case? The inspiratory sound will be less vesicular than in health, and the pitch of the sound will be raised. At the same time, the expiratory sound will be likely to be prolonged, and the pitch of this sound raised. Suppose a greater amount of solidification exists, but not a sufficient amount to give rise to the bronchial respiration, the broncho-vesicular respiration approximates to the bronchial, but it differs from it in these respects:—the inspiratory sound still has vesicular quality, although in a slight degree; the tubular quality has encroached upon it, but has not supplanted it; it is raised in pitch in proportion as the vesicular quality is lessened; the expiratory sound is prolonged and high in pitch and more intense than in health, but these characters are not as strongly marked as when the respiration becomes purely bronchial. Now, between these two extremes, the broncho-vesicular respiration may exist in every degree of gradation.

Thus, you see that the essential point of distinction between the bronchial and the broncho-vesicular respiration, is this: in the bronchial the inspiratory sound is non-vesicular, or tubular; in the broncho-vesicular it is not purely tubular, but the vesicular quality is more or less diminished. And in proportion as the diminution of the vesicular quality is slight, the change in other respects is small; the inspiratory sound rises a little in pitch, and the expiratory sound is somewhat prolonged, more intense, and higher in pitch than in health. And, again, in proportion as the diminution of the vesicular quality is great, the change in other respects is so also; the inspiratory sound is raised in pitch, and the expiratory sound is prolonged, intensified, and raised in pitch, in these respects approximating to the characters of the bronchial respiration.

I hope I have succeeded in my description so far as to give you a clear mental apprehension of what I mean by the broncho-vesicular respiration. As regards its significance, it denotes solidification of lung, but solidification not sufficient to give rise to the bronchial respiration, the amount being proportionate to the degree of the broncho-vesicular modification. A single case of pneumonia offers an opportunity to study this sign in all its gradations. While the exudative deposit is going on, we have the broncho-vesicular respiration until the solidification becomes complete, and then the broncho-vesicular is merged into the bronchial. Again, during convalescence, we have, as evidence that deposit has begun to diminish, the bronchial respiration giving way to the broncho-vesicular. First, we notice only a slight vesicular quality in the inspiration; the next day this quality increases, and so on, from day to day, as the deposit disappears; and, as the vesicular quality comes in, the pitch of the inspiration sound is lowered, the expiratory sound becomes less and less prolonged, intense, and high, until, at length, the broncho-vesicular respiration merges into the normal vesicular murmur, and then we know that the deposit is gone. It is a beautiful exercise thus to observe the gradual change from the bronchial respiration to the normal vesicular murmur during recovery from pneumonia.

But it is in the diagnosis of tuberculosis, that the broncho-vesicular respiration is especially of practical value. In the cases in which the deposit of tubercle is small (and it is in these cases alone that the diagnosis is difficult), it is important to make a careful comparison of the respiration on the two sides with reference to this sign. Here it is essential to bear in mind and make due allowance for the normal disparity between the two sides, of which I have already spoken. The respiratory murmur at the right summit, as compared with that of the left side, is, in health, slightly broncho-vesicular. This fact sometimes occasions embarrassment when the question is as to the existence of a small deposit of tubercle on the right side; but it assists us when the question is as to the deposit on the left side, for if the respiration of the left summit, as compared with that of the right, presents the broncho-vesicular modification, we know that it is due to disease. Recollect, then, if you please, that when we find the inspiratory sound on the right side of the summit to be less vesicular and higher in pitch than on the left side, and the expiratory sound prolonged, this may be only a normal disparity. To decide whether the disparity be too great to be normal in certain cases, requires an exercise of judgment which is acquired by experience. But if the characters of the broncho-vesicular respiration exist on the left side, in view of the normal disparity between the two sides, we recognise it at once as a morbid sign.

Another modification of the respiration denotes the existence of cavities. The description of cavernous respiration by writers who recognise it as a physical sign, and by Laennec himself, is unsatisfactory. The characters which distinguish it from the bronchial respiration are not clearly stated; in fact, they seem to me to have been imperfectly understood. Some distinguished writers on physical exploration declare that the sign does not exist. Among these is Skoda of Vienna. Some appear to consider the bronchial respiration as indicating sometimes solidified lung, and sometimes cavities. Some who recognise the existence of the sign are content to say that the respiration is cavernous when the sound conveys the idea of cavity. Such a mode of description I believe to be extremely objectionable. We should never allow any scope for the imagination in determining the characters of signs, and we should never decide *à priori* what ought to be the characters derived from certain physical conditions. The evidence on which our knowledge of signs rests, is derived exclusively from clinical observation in connexion with examinations after death. I believe that there is a cavernous respiration, and I claim to have pointed out the most distinctive of the characters by which it may be distinguished from the bronchial respiration. In my work on the respiratory system, I made this statement with diffidence, but ample opportunities for verifying the correctness of the description which I then gave, have led me now to speak with positiveness. Cases will undoubtedly occur during the winter in which I shall be able to localize cavities during life, and confirm the correctness of the localization by examinations after death.

The cavernous and the bronchial respiration are practically confounded by many, if not most practitioners, who give more or less attention to auscultation. Now, the bronchial respiration signifies solidification of lung, and never aught else; and so cavernous respiration can only signify a cavity. They are not convertible signs, and whenever we make out the characters of cavernous respiration, we may infer with positiveness the existence of a cavity. What then are the characters distinctive of cavernous respiration? They are, as regards the inspiratory sound, more or less intensity, absence of the vesicular quality and lowness of pitch; and, as regards the expiratory sound, more or less intensity, and the pitch lower than that of the inspiration.

I now place the characters of the cavernous respiration in contrast with those of the bronchial respiration on the black-board:

BRONCHIAL RESPIRATION.		CAVERNOUS RESPIRATION.	
Inspiration.	Non-vesicular. High in pitch.	*Inspiration.*	Non-vesicular. Low in pitch.
Expiration.	Higher in pitch than the inspiration.	*Expiration.*	Lower in pitch than the inspiration.

The cavernous respiration is not a sign of very great practical value, because it requires for its production several contingent circumstances in addition to the existence of a cavity. The cavity must be of some size; it must have free communication with the bronchial tubes; the walls must be flaccid enough to collapse with expiration, and it must not be filled with liquid. Moreover, it must be near the superficies of the lung, and not covered with a layer of lung solidified, else the bronchial respiration will be likely to predominate and drown the cavernous. All these conditions are by no means always present, and hence, although the sign, when present, is proof of the existence of a cavity, its absence is not evidence that a cavity does not exist. In seeking to illustrate this sign, it is generally not easy to find it even in the cases of advanced tuberculosis in which it is altogether probable that cavities exist. But when found, it is often presented in contrast with the bronchial respiration produced by solidified lung in close proximity to the cavity.

In seeking for the cavernous respiration, the stethoscope should be employed in order to circumscribe the source of the sounds. If the ear be applied directly to the chest, the sounds come from too wide a space, and it is rarely the case that the sign can be made out.

I shall conclude this lecture by describing a sign which may with propriety be considered as a variety of cavernous respiration. I refer to amphoric respiration. I have already explained the signification of the term amphoric when applied to a percussion sound. It has a similar sense when applied to auscultatory sounds. Whenever the respiratory sound has a musical intonation resembling that produced by blowing gently into the mouth of an empty vial or bottle, it is amphoric. It sometimes derives this musical character from tuberculous cavities, and the mechanism is precisely the same as when it is produced by blowing into a bottle. In both cases the tone is due to the action of a current of air upon a collection of air in a cavity. In blowing into the bottle the current of air within the mouth plays upon the air within the bottle and gives rise to the musical vibrations; and so in the production of amphoric respiration by a tuberculous cavity, the current of air brought to the opening into the cavity by the bronchial tubes, plays on the air within the cavity. This sign is rarely present even when cavities exist, for it requires conditions which are only occasionally present. The cavity must have a certain size; it must have rigid walls so as not to collapse with expiration, and it must communicate freely with the bronchial tubes. But the sign is generally present in another affection, viz. pneumo-hydrothorax. In this affection we have air in a large space, within the pleural sac, and a perforation of the lung. The current of air in the bronchial tubes, acting on the air within the cavity of the pleura, occasions the musical sound. In this affection it is associated with other signs which have been considered, viz. tympanitic and sometimes amphoric resonance on percussion, and the Hippocratic succussion sound. When associated with other signs denoting advanced tuberculosis, exclusive of the signs of pneumo-hydrothorax, it is proof of the existence of a tuberculous cavity.

Original Communications.

MORAL INSANITY IN RELATION TO CRIMINAL ACTS

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It is easy to say, *That man is crazy;* but it is not so to prove it. How can a simple affirmation or a medical certificate, without proofs that a man is insane, deprive him of his liberty?

There is no doubt, at least in Europe, and perhaps here, that if mental diseases had been accurately described—if physicians had not contented themselves, and magistrates been satisfied with a single line assuming, *ex virtute officii*, that a man was to be shut up as insane, many errors, injustices, and miseries would have been spared!

It is true an authentic demonstration is not always easy—who is infallible? At all events, when a physician gives his opinion in a court, relating to the life, honor, and property of individuals, his office is of the highest character. The importance of his function must elevate his soul and mind above all private interest.

As we have said, it is difficult to say when spiritual causes have sufficiently acted upon our body to elicit insanity. Where is the line or boundary of sanity and madness in a corrupted conscience? Here again our only criterion is medical observation, with this difference, that we ought to be very cautious, and always avoid appearing to be under the influence of some secret motive. It is about the same for everybody concerning the moral cause of insanity. There is also a line we ought not to pass. Every man should take care of his weak side. Education should have, for one of these objects, to fortify our wills, in order to make up for gifts that we may want. Not only is this true, but, as the Scriptures say, the *spirit is the same, but gifts are different*. Let us suppose that a man of ordinary ability would, from the plough, begin and assiduously prosecute high and profound studies. (I have often seen such cases in rural schoolmasters attempting to study divinity.) Now that man will soon feel some premonitory symptoms of an over-exertion and fatigue of his intellectual powers. If he continues his foolish task, he will perhaps very soon say that some light from heaven has descended upon him, and turn a furious maniac.

The so-bitterly criticised theory of a most distinguished alienist, Dr. Moreau de Tours, who asserts that madness is often the result of an over-activity of the brain, is justified in this and many other causes. When that author affirms that if vital force accumulates in one organ, one of its results must be either a great energy of function or a lesion of that organ, he says something very true. It is in this sense that Dr. Moreau finds some affinity between genius and madness. His antagonist, M. Flourens, though a man of immense talent, is, I fear, a bad judge of the value of this theory, since the learned Perpetual Secretary of the Institute of France, amongst a great number of pamphlets on all sorts of subjects, has written a small compilation entitled *Essai physiologique sur la Folie*, which shows that he never gave much attention to that special subject of medicine.

As insanity cannot exist without a form of exterior disease, so bodily health cannot accompany and is incompatible with a mental infirmity. Symptoms of diastrephia are numerous, and moral insanity or diastrephia presents several phases or stadia during which the following symptoms may be observed:

Generally patients are different in manners, ideas, feelings, conduct, and even language, from what they were before. No delirium or delusion is sometimes perceptible. In some cases bad habits, customs, or indulgences, are more frequent and become notorious. After a certain time elapses since the premonitory symptoms, patients become incapable of serious occupations. Their will is impaired, their power of control lost, and their instincts let loose; there appear irresistible or unaccountable eccentricities and whims. It is in this period that sometimes delusions or a mono-delirium appears, but it is rare.

During that phase it has been noticed that some patients take pleasure in telling stories, intriguing, and deceiving people: otherwise they are not loquacious; but then the moral infirmity augments. There exist often hardness of heart, selfishness, and bad dispositions. From that state they become profoundly melancholic.

If the character of the disease still augments, immorality accompanies the propensity of doing harm or committing some atrocious crime. The patient is dull, and appears indifferent, though secretly he has a delight of preparing some evil action. When crimes are committed, their execution is particularly remarkable. When the patient is detected, or when he offers himself, he admits readily the facts, however scandalous or horrible they may be. Generally there is a complete absence of grief or remorse.

In all these cases, letters, memoirs, designs, etc., are of the greatest value to ascertain the mental condition of the writer. Their general feature shows cunning, complaints, and false statements.

Diastrephia may have a milder course, and present a remittent series of fits. Some take place several times in the day, or in the week. I have seen a patient who remained sometimes one whole year free from attacks. During their lucid intervals they offer no sign of insanity, except some disturbances in their general health; but in the attack patients say they suffer a great deal in the head.

Some patients, and especially dipsomaniacs, employ much art in preventing people from remonstrating. For instance, they will feel offended—being gentlemen or gentlewomen—to be told that they were found dead drunk in some sewer of a street, etc. Their infirmity makes them powerless against a subsequent impulse, and they fall to the lowest scale of degradation. Some patients, after a fit, regret what they have done, and sometimes beg to be taken care of for the future.

No medical man denies to-day the solidarity of *innervation*, *sanguification*, and *nutrition*, and there is certainly an intimate relation of these functions with those of the brain. For instance, any long process of enervation, produced by solitary habits, will soon operate a change in the mental organism, just as any deviation of nutrition will produce a morbid diathesis.

Who would maintain that a mental lesion can exist exclusively of any morbid reaction of the body? We have never met with such an exception. If it was so, diastrephic cases might remain the subject of interminable discussion between lawyers, philosophers, and physicians. Our conviction on this subject may perhaps make us appear to overrate the value of physical symptoms; but we must declare that it is their coexistence with mental aberration that gives them the advantages upon which we insist.

Now what we say of diastrephia is applicable to cases of simulation of insanity. Let the part of a feigner be played as well as possible, emotions would be difficult to imitate; but somatical symptoms would be still more difficult or impossible to imitate. Supposing even that a simulator could impose upon a skilful observer, the result of his game would very probably be *real* insanity—a curious and forgotten form of insanity to which I shall afterwards refer. For the present I wish to state that it is a direct proof of the power of ideas on our bodily structure.

Among the physical signs which I am going to mention, one of the most important is the existence of a morbid action on the brain. Pain is reported to exist in different parts of the head, and other bodily symptoms depend often upon a reaction of the nervous centres. They present various features, the *ensemble* of which strikes at first sight the practical observer.

According to the excellent observations of Dr. Billod, in the tenth volume of the *Annales medico-physiologiques*, there exists a curious interruption of volition in the muscular system. In spite of the patient his limbs cannot obey his purposes. It is just the opposite of convulsive muscular action which takes place in various diseases. The cerebro-spinal system is disordered, so are the functions of the sympathetic. Irregular innervation of arteries and veins produces latent disorders in various parts, of which patients rarely complain. There is an irregular visceral and capillary circulation which affects nutrition and several of its functions. Patients are emaciated, they feel a general heaviness over the whole body. Their complexion is sallow, their skin harsh, and its emanation has a peculiar smell. Very often they are feverish, the heat of the skin is increased, the pulse frequent, the tongue furred, and the bowels almost permanently confined. Their rest is troubled during the night; they want to lie down often during the day. In cases connected with melancholy there is a deficient sensibility of the peripherical ramification of nerves sometimes producing anæsthesia. Generally an expression of pain is apparent. The physiognomy is dull, and suggestive of indifference and selfishness. The face is pallid; the stare is not vacant but uncertain. Sometimes the eyes wander about, or there exists a tremulous movement of both eyes when the patient fixes them on any one. Squinting has been remarked, but it is rare. Sometimes the pupils are irregularly contracted, which is a bad sign. When there is irritation of the brain the pupils are contracted. They are dilated in the congestive state, without irritation of that organ. The non-contraction of pupils indicates a loss of sensibility of the whole nervous system. Generally there is a peculiar look in diastrephia, indicating shrewdness and a disposition to do mischief. These signs are more apparent when fits are going to take place.

In this disease we have seldom seen a case without dyspepsia; there are gastralgic pains and a voracious appetite. Palpitation of the heart very often accompanies that disposition, and augments the sufferings of the patient. Complications may arise: thus uterine affections are the source of moral disturbances. Some arise from essential and local diseases, as gout and rheumatism.

Patients of a nervopathic disposition are often perfect hypochondriacs. Some, in spite of a suicidal propensity, are constantly occupied with their health and comfort. They ask continually for medicines, and are afraid of doing something wrong concerning some trifle, but, by a sudden impulse, they will commit suicide. When interrogated or asked why they committed certain deeds, some can give no reason or account for it; it was *an impulse*, *a desire*, etc. Some are very cunning in avoiding explanations.

We have seen a lunatic who wanted to be under the guard of somebody, even of a child, lest he should do some harm. That man, who had resided several years in the village of Gheel, in Belgium, was boarded in the family of a small farmer, and had never committed the slightest offence although under the influence of diastrephia. I often visited him; he was sometimes alone, or under the guard of children—the parents being at work in the adjoining fields. Some people of his birthplace having told the burgomaster of his village that the patient was cured, since no insanity could be found in his *talking*, a medical report was required, and, notwithstanding its conclusions, the administrative authority set him at liberty. He went home; but the man, let loose to his propensity to murder, killed his wife, in order, as he declared, to *cook her feet*, and, being disturbed in his horrible meal, he also killed an old man who had accidentally called at his house.

It is certainly remarkable that in the free-air system insane people, under the moral restraint of knowing that they are watched and observed, are less tempted to yield to morbid impulses than otherwise. In a population of a thousand free lunatics in a village, the great number of moral insanity cases is quite sufficient to guarantee the practicability of the system.

Some authors have reported that lunatics experienced, in cases of fits, a sensation of burning that, when it arrived at the head, caused a momentaneous furor. There is, and I must notice it, much affinity between diastrephia and epilepsy—they pass also into each other, as in the following case:

A young man had suffered eight years of epileptic fits. During two years he was free of them, but instead he had fits of diastrephia. As soon as he felt the attack he used to cry, "*Dear mother, be off, or I must kill you!*"

Diastrephia, if not cured in its early period, ends generally in dementia or general paralysis. This disease is frequent; but authors describe it under another denomination. For instance, all the cases cited in the manual of Bucknill and Tuke, from p. 178 to 220, under the head of *Emotional Insanity*, are all, except a case of erotomania, pure diastrephic cases.

All the symptoms that we have enumerated are not seen at first sight; they require time and leisure to be detected. It is not to be expected that a physician, suddenly called into a court of justice, would be able to ascertain their presence in a first examination. Days, and sometimes months, may be necessary to investigate doubtful and difficult cases. The necessity of a fixed rule by which medical officers should be under the obligation to specify the moral and physiological signs of insanity in their affidavits is evident. The numberless difficulties arising from summary legal reports, and the dangers resulting from it to individual liberty and property, threaten every one. In civil lawsuits concerning the suspension of civil rights, the validity of the public transactions of certain persons, the state of mind of persons having made wills and donations, etc., it is often necessary to examine certificates concerning past periods of the life of a person: but if these certificates or documents are defective or incomplete, on account of some general statement giving no details or description, they can be of no use. In criminal prosecutions it is sometimes necessary to know whether insanity existed at a certain period—its nature and form—sometimes useful documents might be found concerning the parents or ancestors of an accused party. One difficult point remains to be elucidated concerning incipient cases of diastrephia, or rather concerning the period of its prodroms. The question is this—When ought vice and immorality to be considered the proximate causes and motive of a reprehensible act? And when ought it to be considered as the result of a diseased brain? We would propose that, if pathological symptoms are not evident, if, at the same time, psychological signs are doubtful, on account of the identity of probable cause and of its results, no medical man should give his evidence in favour of insanity. And the reason is obvious. In a sort of intermediate state we have no right to decide the question.

In the course of this paper we have tried to keep clear of a confusion about the unsoundness of moral sense, widely different from that unsoundness of mind which is the result of a pathological condition of the brain. Physicians have no wish to impose ambiguities by which juries or public opinion should be bewildered. If they differ sometimes in opinion, it depends entirely upon the nature of doubtful cases.

On my arrival at Sing-Sing I was kindly lent a book on the case of a late broker, Charles Huntington, and, through the influence of a most distinguished and deserving physician, Doctor Fisher, residing there, was introduced to the convict in the State prison.

While reading the case it appeared to me that either the subject had been a lunatic, afflicted with a special deficiency of moral sense, with great instinctive cunning and ability to deceive, or that he was a lunatic under the influence of some kind of diastrephia. After my visit to the prison I came to the conclusion that the prisoner was neither the one nor the other, although many facts showed that he had been in the process of becoming really insane.

After a few words were exchanged, the convict himself declared that, in his opinion he had never been properly insane, though he had felt something wrong in his head until two years since. Up to that period he would have counterfeited any man's signature. He added that his habit of forging had come to such a degree that to get *his own money* out of a bank he would have rather employed a forged paper!

Being, of course, a perfect stranger to all parties who appeared in this trial, the opinion I venture is free from prejudice and only liable to errors of my own.

It appears that in the State of New York it is a jury that decides upon cases of insanity in civil and criminal cases when the plea of insanity is brought forward. The law of the State, as explained in the case of Huntington, does not admit moral insanity as an excuse for responsibility! Partial insanity or monomania would not absolve the party unless it wholly deprived the patient of the power to distinguish right from wrong! We have already objected to such absurd worn-out jurisprudence—more perhaps than 600 years old—in England. But whatever the law may be, by another mistake the jury is omnipotent in scientific difficulties, because by its verdict the jury may either absolve without explanation or condemn without the slightest light on the scientific question. Now I believe that the jury was accidentally right in finding Huntington guilty, although some doubts might have been entertained on his real state of mind.

In this point of the trial I am convinced of the good reasons brought forward by the two honorable medical witnesses to establish their opinion. I do not partake entirely of it, but I acknowledge their sincerity and scientific ground. These physicians have, I may say, to the honor of our profession, shown their profound knowledge and aptitude to discuss difficult points on a medico-psychological specialty; but the whole of their discussion with clever jurists shows how much physical symptoms were wanted to confirm their opinion. It is even curious to remark that their opponent's arguments were based on that very want of symptomatic evidence. However, the whole appearance of the case leads to the admission of a prodromic stage of diastrephia.

The conduct of Huntington from a boy up to the time of his trial bears the characteristic of some morbid diathesis and hereditary taint of insanity. His diseases, when a child, might have had a depressive influence on his conscience; and later, when a man, his temperament and propensities could hardly be checked by mixing with speculators in stockjobbing. He lived alternately in wealth and poverty, extravagance and want. In prison he was found indifferent to his situation, although accused of a capital offence! His appreciation was certainly defective. Reading the case, one might ask whether he was not simulating insanity? The prisoner maintained that he never intended injuring people! Still he found in forgeries the means of gathering enormous sums of money, of which he spent a great deal in self-gratification! Huntington said to us that it was a *desire that came over him;* that nothing could have prevented him from forging false paper, and that it was only since two years that he felt better, could sleep, and could say that he would not do it again.

The learned counsel for his defence explained the curious circumstance of the carelessness of his client, who had made no arrangements to escape or prevent his arrest.

Then the able advocate put several questions to the physicians. 1st, Whether, in their opinion, the defendant was sane or insane when the forgeries were committed? 2d, If insane, what was the nature and character of that insanity?

It was answered that it might be possible that all might take place as the result of almost unparalleled recklessness, but that from personal examination, and also from the testimony heard, it might be said that those actions were the actions of an insane man.

This answer appears unsatisfactory because it admits almost the possibility of recklessness, and does not point out the morbid nature of the acts. The testimonies on Huntington's conduct could not supply the wanted symptoms of an actual state of insanity. The mental state of the prisoner was the first and principal object of demonstration; his actions were naturally the consequence of his mental disposition.

Cross-examined by the advocate of the prosecution, one of the medical gentlemen was asked this question—

Upon what the prisoner said to you, and from what you judged from his appearance, would you pronounce him of unsound mind, from your examination and from his appearance?

The question is direct, and points the vital knot of the case. Besides, this question shuts all issues, by repeating that the source of information must be personal examination of the prisoner.

The answer was—Not by his appearance, but from my examination of him I should.

Now by this answer physical symptoms were almost abandoned as of no value. However, the same physician said further, that the expression of the face of Huntington was not that of a villain but that of an insane man.

This general statement might have been good, if followed by a description which might have convinced the jury and court. Now, the advocate for the prosecution very adroitly asked the doctor to explain, what was the disease of his physical organization which prevented him from resisting the tendency to commit forgery? It was a quibble; but the lawyer knew the weak side of a jury, and was certain of being victorious if he could prevent the physician from giving a satisfactory answer. The physician honestly said that he could not give the pathological anatomy of the case! The advocate insisted upon knowing the relation of a physical lesion of the brain to a moral perversity, and repeated the question, What urges the patient to forge paper? This insistance was very likely a necessity of the situation, because the learned lawyer would not have purposely laid a sort of trap for his respected and intimate friend, as he called the doctor in his exordium. I believe that such an unqualified question might have misled a less capable and learned physician to invent some new name of special disease having for its characteristic to *forge paper to the value of half a million of dollars.* The question was ridiculous and improper, because it had nothing specially to do with the trial, as being a question on primary causality in our moral nature, and a *modus operandi* of anatomy.

Another physician, also a learned professor in a medical school, explained with great accuracy why he did not believe in the existence of monomania. He thought that Huntington was insane because his intellectual and moral nature, as well as his propensities, were diseased. The honorable witness stated, that in this case no delusion nor hallucination existed, but only *moral insanity.* He said that Huntington, in his moral obliquity, would, perhaps, in the West, have committed criminal acts attended by violence; but that having *satisfied himself* that Huntington was insane he thought it unsafe to say or foretell what an insane person might be inclined to do.

I sincerely regret that this witness did not add objective proofs to his own conviction. Although the verdict was, I believe, a just and a right one, will it not appear injudicious that a jury of laymen should have to appreciate and judge a medical discussion, led by clever but artful gentlemen of the bar? With reference to the knot offered to the jury to untie, I imagine that the honorable jurors may have very well said among themselves that balancing the moral account of the broker, and finding him guilty, his state of mind had little to do with their decision.

I conclude this paper by the following propositions:

1. That the disease called moral insanity is but an affection of the faculty of volition and instinct, attended by physiological symptoms.
2. That the name of moral insanity is defective, because it bears no relation to the cause, symptoms, and results of that disease; and that it misleads the opinion of the bar concerning crimes committed under its influence.
3. That the laws and rules concerning insanity, relating to civil and criminal cases, ought to be put in accordance with the actual state of medical science.
4. That no person ought to be considered as being insane if physical and mental signs cannot be traced and ascertained.
5. That a reform concerning medical certificates is necessary to insure regularity in obtaining from courts or judges orders to detain a person as insane. That no such document be admitted unless containing, 1st, All the moral and physical symptoms of the case; 2d, The diagnosis and prognosis of the disease.

Now, until a reform be made, we should have license to say to the legislators and jurists of this and other countries—Si habetis corpus, nos habemus animam.

Sing-Sing, Oct. 1861.

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CONFLUENT SMALL-POX.

PROTECTING POWER OF VACCINATION.

By THOMAS W. BLATCHFORD, M.D.,

OF TROY, NEW YORK.

On Friday, the 28th of September, I was requested to visit at the Orphan Asylum in Troy, Elizabeth Wilson, aged 2½ years. She had been an inmate of the Institution but twenty-two days. At the time of her admission she was laboring under a chronic diarrhœa of long standing, which had been partially checked. I found her with a quick full pulse, very hot skin, short dry cough, difficult breathing, and exceedingly restless, crying at every attempt to cough, and endeavoring to suppress it. These symptoms made their appearance the day before. Viewing it as a case of inflammation of the lungs, in addition to the judicious domestic remedies employed—gentle anodyne expectorants, diluent drinks, and frequent tepid ablution—I added six powders of one gr. of calomel and half a gr. of Dover's powder, each to be repeated every four hours while restlessness continued—also twenty drops of fluid extract of veratrum viride in twenty teaspoonfuls of water, directing one teaspoonful to be given every four hours, commencing in two hours after the powder, but not to wake the child for medicine. The two next days there seemed to be but little change, except that she slept more and breathed easier. On Monday, the 1st of October, she seemed decidedly better, less heat, easy respiration, and quiet gentle sleep, but the nurse called my attention to a breaking out "on the cheek which she supposed was measles."

These patches certainly resembled measles, but after examining the chest, abdomen, and extremities, we found no other traces of the eruption. The active treatment was discontinued, she took freely her drinks and liquid nourishment, with an occasional anodyne draught. At the next visit, Tuesday, I found the child still comfortable, having passed a tolerably quiet night, but my attention was called by the nurse to a few *pimples* on the face and other parts of the body. Not suspecting small-pox, and the child appearing better, I did not give it the examination I should have done. I viewed the eruption as that of mild chicken-pox. The bowels not having been moved for two days, I directed an enema. The next day the condition of the child was much the same, except that the eruption was a little more developed. As I was going away the superintendent met me, and said, "Dr., do you think Elizabeth has the *chicken*-pox?" "Why yes," I replied, and passed out. This question, with the emphasis on "chicken," I began to think meant more than at first appeared. It annoyed me, for the opinion of intelligent nurses I have long since learned to respect. During the morning, too, I found there had recently been several cases of small-pox in the immediate neighborhood of the Asylum; and early in the afternoon I returned to the Asylum to satisfy myself of the real nature of the case. Under my magnifying glass I at once detected its true character. There was now no time to lose. I directed the nurse to wrap up the child in the cradle clothes in which it lay, get herself ready for a ride, and I would call with a carriage in half an hour. I found it difficult to procure a carriage for such a purpose, and therefore within the half hour, I returned with my own conveyance and took the child (it being asleep) and nurse to the Small-pox Hospital. Our patient did not wake up until the gig stopped at the door of the Hospital.

She was cared well for there, and for three days seemed to be doing as well as could be expected. It proved to be a severe case of confluent small-pox. About the third day her diarrhœa returned, she grew rapidly worse, and on the sixth day of her admission died.

After leaving my charge at the Hospital, I immediately took measures to vaccinate the inmates of the Asylum. Having himself no reliable vaccine virus, my friend Dr. Brinsmade furnished me with a beautiful fresh crust, he retaining only a small piece for immediate use. I put it in a small mortar, added forty drops of water, and rubbed it until the whole was dissolved. I put the solution in a drachm vial, and with a small short-nibbed camel's hair pencil proceeded to the Asylum and vaccinated ninety-six children and eleven adults—being the entire family, to accomplish which took me less than half an hour. I did it after this manner; the assistants baring the arms of the children, I made in the arm at the insertion of the deltoid muscle eight or ten fine scratches with the point of my lancet, crossing them with about as many more, and all within the diameter of the eighth of an inch, being careful to draw no more blood than just enough to designate the spot scratched, then with the brush I applied the dissolved virus, rubbing the part gently for an instant. Not one child out of the ninety-six made either noise or resistance, the operation being unattended with pain. When I had completed my task I found I had infection sufficient left to vaccinate at least as many more.

On the fourth day, I had the satisfaction of finding an incipient pustule on each arm vaccinated. On the eighth day, a thorough examination showed that not a single case of failure occurred; all had sore arms, and out of the ninety-six children, sixteen were found to have a genuine vaccine pustule, proving them to have been protected by vaccination. In the remainder was produced the spurious pustule peculiar to vaccination.

It is now six weeks since the exposure, and no small-pox or varioloid has made its appearance in the institution; and this is the more remarkable from the fact that the room appropriated to Hospital purposes is in the centre of the building, with doors on three sides and windows opening into an inclosed piazza, and is one of the most frequented rooms in the building.

I publish this case for two reasons in particular: 1st, to show the protecting power of vaccination; and 2d, the ease with which a large community may be vaccinated.

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Dr. William D. Purple, an eminent practitioner of Chenango Co., N. Y., has been nominated for the State Senate. ——Dr. Toland, of San Francisco, Cal., according to the *Pacific Med. Jour.*, "enjoys an income from the practice of medicine and surgery probably of $35,000."——Dr. John H. Griscom, of this city, is superintendent of the distribution of the fund for the relief of the families of volunteers, at a salary of $200 per month.——Dr. Wm. B. Atkinson, of Philadelphia, has been appointed obstetric physician to Howard Hospital.——Dr. S. W. Butler, of the *Med. and Surg. Reporter*, has been appointed physician to the Insane Department of the Philadelphia Hospital.

Reports of Hospitals.

BELLEVUE HOSPITAL.

STARCH BANDAGE IN RECENT FRACTURE.

With few exceptions authors limit the immovable apparatus to those cases in which the inflammation and swelling following the injury have entirely subsided, and for the best of reasons. If applied as originally recommended, the dressing being perfectly unyielding, if subsequent swelling occurred at the seat of injury the most serious consequences might follow. The compression of the veins would readily become so great as to interrupt the return circulation so far as to produce gangrene of the extremity. Instances of this kind in which, after the dressings were applied, the swelling increased, and mortification occurred, early led to the strict rule of practice, never to apply the immovable apparatus until all danger from the subsequent swelling of the limb had clearly passed. The rule is a just one, and should never be departed from when the dressings are applied in the manner first recommended.

There is a manifest advantage, however, in applying permanent dressings to simple fractures immediately after their occurrence. There is, then, no shortening of the limb to be overcome by subsequent traction, and no painful spasms of the muscles excited by the irritation of the fractured bone. If the displaced fragments are placed and retained in perfect apposition, during the quiescent period that intervenes previous to the commencement of the reparative process, there will be less liability to swelling and subsequent inflammation. Besides, in private practice patients and friends are never satisfied unless the fracture "is set" immediately, the mere manipulations by which the fragments are opposed being with them the most important part of the whole treatment.

Admitted that the starch apparatus is well adapted to old fractures, is it possible to render it serviceable as a primary and yet permanent dressing? This question has now been definitively settled affirmatively. By first applying a thick layer of cotton wadding to the limb, as recommended by Burggraeve, of Ghent, adapting it nicely to all the irregularities of the parts, the starch apparatus may be at once applied in simple fractures with the happiest results. The cotton should completely envelop the whole limb, and the first roller be placed over it. This should be applied firmly, and the application of starch should be first made to this bandage. The cotton is so elastic as to perfectly protect the superficial vessels from undue compression, even though swelling should follow. But the contrary effect is generally produced. Before the dressing is completed, the patient remarks that his limb feels pleasantly cool, and never that the dressing is too tight in the vicinity of the fracture. The result of this application of the starch is a rapid reduction of the swelling; thus rendering it the best local application that can be made.

We have recently seen the starch apparatus applied in this manner in Bellevue Hospital, to recent fractures of the leg, thigh, and arm, without the slightest inconvenience, but with immediate relief to swelling, and those painful startings and other symptoms attendant upon the exposure of the limb for several days without dressing. In fractures of the thigh, the patient is able to leave his bed as soon as the dressings are dry, generally about the third or fourth day after this application. Of course no weight is to be borne upon it. In fractures of the arm, where non-union is so common, the starch apparatus may be applied at once, and all dangers of such results be obviated. To country practitioners this dressing offers great advantages. The limb is at once firmly and securely put in a permanent dressing, without the slightest chance of displacement or other complication. The method of applying the immovable dressings is well illustrated in Erichsen's Surgery.

INFLAMMATION OF SPINAL CORD AND ARACHNITIS.

Reported by H. S. Plympton, M.D.

Case I.—*Abortion—Partial Paralysis—Convulsions—Gradual Increase of Paralysis—Death—Autopsy.*—

B. S., æt. 22, intemperate, married; entered the hospital Oct. 14, under Dr. Clark. On the 8th of August last she aborted, and since that time she has not had her menses, nor has she had the perfect use of her limbs; has drunk spirits to great excess. Ten days after the abortion she had a convulsion and lost the use of her right arm; which she afterwards partially regained; had severe pains in her limbs from the time of the abortion. Oct. 8. She lost the use of her legs and left arm. Oct. 14. She could stand on her feet, if supported, and could slightly move the legs and left arm; she had very good use of her right arm at this time. The special senses were unimpaired, but she had an anxious look; pulse 130; had control of her discharges. Oct. 19. The breathing was disturbed; less power of motion; slight cough; pulse 106; bowels constipated; treatment laxative and opiate at night; five drops of phosphoric acid three times during the day. Oct. 25. Had entirely lost the use of her arms and legs, but could rock her body from side to side; pains more general and severe; could not sleep without an opiate; more cough; no signs of disease of lungs; pulse 110; urine passed involuntarily. Oct. 26. Bowels relaxed and both urine and fæces pased involuntarily; much pain in rectum, for which suppositories of opium and bismuth powders were given. The cough was distressing and almost constant, but nothing was expectorated; sensation acute as before. Oct. 28. Bowels regular; pulse 108; breathing free, but the cough almost constant. Oct 30. Urine examined, but no albumen was found; pulse 138; pupils dilated; respiration feeble and sometimes painfully difficult; sensation perfect; deglutition difficult; severe pain in head. Four o'clock p.m. Dyspnœa extreme, ordered half a grain of opium, which gave great and speedy relief; pain in head more severe, mind clear but hearing dull; during the night she had attacks of dyspnœa relieved by opium. Oct. 31. Patient died at twenty minutes past seven in the morning; death preceded by fainting fits and cold sweat; had no dyspnœa and no pain, but was conscious to the last moment; sensation perfect; pupils dilated.

Autopsy.—Present Prof. Metcalfe. Spinal column opened. The *cord* contained two small tumors, and showed traces of inflammation. Perhaps it was a little harder than natural. The abdominal organs healthy. *Brain.*—The arachnoid was pearly white in the course of the vessels and was considerably distended with fluid. The ventricles were full of fluid. The arteries, at the base of the brain, had a whiter track than any of the others, and their coats were thicker. There was no softening nor other appreciable disease of the substance of the brain.

Case II.—*Symptoms of Arachnitis—Headache—Vomiting—Death—Autopsy.* (Service of Dr. Clark.)

Hannah H., æt. 27, married, temperate, came into the hospital Oct. 19. Patient was remarkably well nourished; had no abdominal or thoracic disease; had pain in her head for ten days and vomiting for a week. Had been somewhat deaf for thirteen years. On entering she complained of severe pain in temples and back of her head; has perfect use of all her senses except hearing; she could hear a very loud voice. Bowels constipated; opened by castor oil; some epigastric tenderness and frequent vomiting; ordered iodide of potassium as a diuretic. Oct. 21. Slight strabismus of one eye; right pupil more dilated than left; never had double vision; pulse 86. Oct. 23. The patient had slept, and had some muttering delirium; walked about the ward. Right pupil very much dilated and the left normal. Oct. 25. Both pupils dilated. For a few moments heard the nurse speak in her ordinary voice, but at the visit an hour afterwards could hear no sound at all; pulse 110 and weak. Oct. 27, 9 a.m. Patient again heard the voice of the nurse and answered questions, but in a few moments was deaf as before. Other senses perfect. Answered questions written on paper. Strabismus increased. 10 A.M. The house physician found the patient dying; eyes straight, widely open, pupils dilated, hands clenched, skin cold, heart gradually ceasing, and breathing easy but growing fainter and fainter. Died 10.15 A.M.

Autopsy.—No loss of flesh. On removing the calvarium the dura mater was found very much congested; the arachnoid membrane filled to bursting with a pale green serous fluid, containing lymph, as also did the ventricles. The choroid plexus was pale. The corpus callosum, corpora striata, optic thalami, and the inferior portions of the hemispheres, were softened. The veins of the head were largely dilated, and the tracks of the arteries in the arachnoid were marked by white lines.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

DISEASES OF THE BRAIN AND SPINAL COLUMN.

The following cases are all that relate to diseases of the brain and spinal column which have been presented to the Society during the past two years, and we have thought best to group them under a general heading, in order that we might, as far as possible, follow out a certain plan of classification. They have been collected from different meetings, and are necessarily widely different in character, but each individual case or set of cases has its own particular claims to attention, either in relation to peculiar complications, to results of treatment, or to the general characters of the disease.

MANIA AND DEMENTIA, COMPLICATING ACUTE RHEUMATISM.

Dr. **John T. Metcalfe**, at the meeting held April 19, 1860, reported two cases of rheumatism, which were to him of a very interesting character.

The first case was in a male aged twenty-five years, who had an hereditary right to rheumatism. On the 20th of March he took the disease in the ordinary way, and suffered from it for five or six days, during which time the different joints of his body became in turn affected. On the cessation of his arthritic trouble pericarditis came on, and lasted for a fortnight. The active symptoms in the latter disease, however, soon disappeared, leaving a small amount of effusion, when he was seized with delirium of a mild character, which eventually terminated in dementia. At times he scarcely seemed to know any one, and found it impossible to connect events; then again, in his lucid intervals, he could engage for a short time in conversation. The treatment consisted in the administration of alkalies for the rheumatism, blisters and calomel for the pericarditis. Sleep and freedom from pain were procured by opiates. The main feature in the case was the delirium and dementia, which, in the opinion of Dr. Metcalfe, was a very rare complication of acute rheumatism.

Dr. **Metcalfe** was called in consultation to a second case of rheumatism which had existed about three or four days, affecting nearly every joint in the body. The day before the patient was seen by Dr. M. he had been attacked with delirium. The pulse was 130, the delirium was quite marked, and the characteristic acid sweats were present. On the fifth or sixth day of his disease the patient died, the delirium continuing to the last.

Dr. M. referred also to a third case of a similar sort which he had seen a short time previous in Bellevue Hospital, in which delirium was also well marked, continuing to the death of the patient.

In conclusion, he remarked that he had seen quite frequently a little mental wandering in cases of acute rheumatism, but never marked delirium as in the three cases mentioned. He had found by a reference to authorities that delirium as well marked as in his cases was of very rare occurrence, but much more so was dementia. Burrowes referred to a case which terminated in insanity, and another which resulted in the permanent absence of mental power.

Dr. **D. Tilden Brown** (of the Bloomingdale Insane Asylum) remarked that he had not seen many cases of insanity which could be directly traced to rheumatism. Those cases, however, in which such a connexion of cause and effect could be made out, were, according to his experience, of an unusually severe character.

Dr. **Watson** referred to the case of a lady who was demented for four or five months, the whole cause of the trouble being a simple inflammation of the hip-joint. He was not aware that any rheumatic element existed in connexion with the primary trouble.

THE TREATMENT OF CONGESTIVE AND INFLAMMATORY DISEASES OF THE BRAIN BY CAUSTIC ISSUES ON THE SCALP.

Dr. **Post** was called to see a little girl about three years of age, who had been lying in a somnolent condition for two or three days. He was informed that the child who preceded this one died a year or two before from what had been supposed to have been tubercular meningitis. The mother of the child was said to be tubercular. He did not, however, examine her with reference to that point. The child's bowels being sluggish a cathartic was administered, hoping that in so doing the patient might arouse somewhat from her comatose condition. Croton oil was also applied to the chest. A slight eruption was produced, and there was some relief from the somnolence. The next day she was partially aroused, and he then resorted to a remedy which he had used in a number of cases of similar character, viz. caustic issues to the scalp, applied about an inch from the median line on either side. The part was first covered with porous paper, which was afterwards moistened with nitric acid. On the following day he directed that iodide of potassium be given in two grain doses once in every four hours. The next day he found her entirely wakeful, in which condition she continued until last seen, a period of three weeks, having no relapse. Though she was lively and playful, she was not disposed to sit up. There seemed to be a weakness in the muscles of the neck, inasmuch as the head was apt to fall back when she was raised. She had, however, been improving in this respect.

He mentioned the case because it was one of a series, not all presenting the same symptoms, but characterized generally by a congested state of the brain, which he had found benefited by the use of issues of nitric acid or caustic potash. In the earlier cases treated in this way he had made a single bald spot on the median line, where he then applied the issue; since then he had been led to prefer one on either side, where the resulting baldness could be more easily covered up. He stated that he had occasion several years ago to resort to this practice twice in the same case. In his opinion issues applied in that manner had been much more effective than blisters. He had followed these children up for several years, but had not noticed any deficiency in intellect. He had resorted to the same practice in one or two cases of coma and convulsions, occurring in the adult after injuries of the head, and the symptoms have been very much relieved. The patients, however, subsequently, following out the general rule in those cases, died.

Dr. **Clark** remarked that the fatality of acute hydrocephalus was so great that we were apt to seize with avidity upon anything that would tend to diminish that fatality. This practice of issues upon the scalp had been advocated in one way or another for a considerable length of time. In 1847, a physician by the name of Hahn published the results of his practice with tartar-emetic ulcerations on the top of the head, and asserted that he had a success which had not been equalled by anybody else. Hahn gave perhaps a dozen cases where this treatment was resorted to with success. While Dr. Clark had reason to credit his reports, he had not dared to follow in his steps on account of the very formidable sore which the tartar-emetic thus applied produced. It seemed to be a fit subject for study, with those who were in the habit of frequently meeting with these cases.

Dr. Post remarked that the sores in his cases were not of a very painful character, and in but one was there a superficial separation of bone.

Dr. Blakeman, in this connexion, stated that he had some experience in the use of issues in brain troubles, and in every case where the treatment had been resorted to a decided benefit had been the result. The last one he had applied, was, at the time of making the report, still running. A lady, about four or five years previous, had a slight attack of paralysis, which, however, did not prevent her from sitting up. She was taken in the course of four years with a very violent pain on the right side of her head, which almost deprived her of reason. She would be at times comatose. A nitric acid issue was applied to the scalp in the median line, and she had been gradually improving and was entirely free from pain. She was able to walk a block unassisted.

SECONDARY MENINGITIS.

Dr. Clark related, December 3, 1859, the following summary of nine cases of secondary meningitis, which he had seen during the previous fortnight. They all occurred in adults, and all, with but one exception, terminated fatally. The characteristic lesions were all verified by post-mortem examinations. Two or three of the cases occurred in tuberculous persons, one or two during the course of Bright's disease, and one in the course of rheumatism. The lesions were entirely uniform, from three to five ounces of serous effusion, sprinkling over the arachnoid, with little white dots that were shaded off in the surrounding tissue, increased vascularity (unless the effusion was very great), deepening of the sulci of the brain, and consequent sharpening of the convolutions. In some marked indentations, so that the thumb might have been received by them. The symptoms were quite uniform—death preceded by delirium in every case—that delirium followed by considerable coma and more or less enlargement of the pupil, usually one more than the other. In two of the cases strabismus was present. The average duration of the disease was four days. Convulsions were not present in any of the cases reported, though in one there was a considerable jerking of the body. Convulsions were, according to his observation, of very rare occurrence in the form of disease under consideration.

SPINAL MENINGITIS.

Dr. McCready related the following case:—A few weeks before he was called to see a child, three years old, who complained a couple of days before of pain in the back of the neck, and also some slight feverish symptoms. When he saw the patient the head was curved backwards, shoulders drawn up, the pulse was over 100, the skin was hot, it had lost the power to a great extent over its lower extremities, and was in consequence unable to walk; the bowels were a little constipated and its breath was foul. A dose of purgative medicine was administered, and the next day the fever was diminished, but there was still a loss of power in the lower extremities. This condition had existed for some time, but had continued to improve until the child was able to walk unassisted. He had very little doubt but that the case was one of slight effusion into the spinal cord, without being sufficient to implicate respiration. The effect of the remedies in producing a gradual recovery was of great interest to him. A local application was made consisting of one part of iodine to two parts of soap liniment.

Dr. Parker stated that he had seen a case where there was strong opisthotonos which he supposed arose from spinal irritation; no paralysis, however, was present.

Dr. Du Bois had met with two very aggravated cases of the sort; one of these was a nephew of his, seven years of age, who, when first attacked, was almost utterly helpless. After lying upon his back for seven months signs of recovery began to manifest themselves, and he was then able to have some control over his upper extremities.

The second case he saw with Dr. Hinton, three or four years ago. The symptoms of paralysis were the same as in the former case, but less marked. This child had now almost entirely recovered.

Progress of Medical Science.

PREPARED BY E. H. JANES.

The Trichina Spiralis.

Dr. Kuechenmeister has lately given us some remarks on trichina, the substance of which is as follows:—If we see a patient with sub-typhoid symptoms, whose consciousness is not much impaired, and without diarrhœa, typhoid exanthema, or considerable tumor of the spleen, but with very violent pains in the muscles whenever he moves, we may suppose that he suffers from acute trichina disease. It is then of importance to ascertain whether the patient has eaten half-raw meat, especially pork; but we can be only certain in our diagnosis if we discover the worm by a microscopical examination of the contents of the intestines or of certain parts of the muscles. It seems to be cruel to excise living flesh from a patient; but Dr. Küchenmeister does not think it worse than explorative tapping, which is often done without scruple; besides we do not require a "pound of flesh," but only a few fibres.

Poisoning by Oxalic Acid.

In the *Edinburgh Med. Jour.*, for July, Dr. Henry Duncan Littlejohn relates the case of an infant aged twelve days, to which the mother, an unmarried woman, gave a quantity of oxalic acid and afterwards attempted suicide by swallowing a portion of the same poison. By timely treatment the life of the woman was saved, but the child was found dead shortly after the poison was supposed to have been administered. The most prominent post-mortem appearances were as follows:—"The lips were of a blackish color, and exhibited a puckered corroded appearance. Towards the left angle of the mouth there was a slight scratch. The upper surface of the tongue had a grey sodden appearance, and was covered here and there with a pasty looking matter. The whole of the pharynx and the opening of the windpipe were highly congested. The gullet, from the pharynx to the stomach, was raised in longitudinal folds, had a macerated appearance, and near the cardia was of a deep ashen color. The large curvature of the stomach exhibited a perforation which implicated a considerable part of the posterior wall. The mucous membrane generally was of a dark color, very soft, and could be easily raised from the muscular coat. The pyloric extremity and the duodenum were highly congested, and softened in texture." The remaining portion of the intestines presented a normal appearance, with the exception of the descending colon and rectum, which were congested on their mucous surfaces. The comparative infrequency of this substance being employed to cause death, the speedy termination and the severe nature of the pathological changes, render this case worthy of notice. So seldom, indeed, is it used for this purpose, that Casper, with a medico-legal experience of upwards of 4,000 cases, is said to have never met with a case of poisoning by oxalic acid, though in Berlin it is extensively used as a bleaching agent, and consequently, within the reach of everybody. The repulsive taste, and the large quantity necessary to produce speedy death, would render it an improbable agent for suicide, and equally improbable to be taken by mistake, or administered secretly to adult persons. To infants, however, it may be easily given, though the discolored lips, the scratch at the corner of the mouth, and some spots on the clothing, proved to be of oxalic acid, all show that it was not without some struggle on the part of the infant that the mother was enabled to carry out her unnatural intention. Perforation of the stomach has been rarely observed in this kind of poisoning, and yet the writer mentions, as not a little remarkable, the fact that the same lesion occurred in the last case of the kind published in Edinburgh. The operation of the poison is too speedy to enable us to determine whether the perforation occurs during life, or after death, in consequence of the acid remaining a long time in contact with the coats of the stomach, though in the case before us, appearances would indicate that the poison had been administered in a highly concentrated solution, the corrosive effects of which would be rapidly developed, leaving us to judge that the perforation might have occurred before death. This is the fourth case recorded where perforation of the stomach has followed the action of oxalic acid. Dr. Christison refers to one published in the *London Medical Repository*, in which a young woman took by mistake, for epsom salts, one ounce of oxalic acid, and died in a quarter of an hour. The body was opened three days after death, and the stomach in several places was found perforated, and the other parts so tender as to be torn with the slightest force. A case was published by Dr. Letheby in the *Medical Gazette*, 1844, of a female, from whose stomach three drachms of the poison were taken after death. The stomach had numerous perforations, and was so softened that it could scarcely be handled without tearing. The third case has already been referred to as published in Edinburgh.

CASE OF CROUP IN THE ADULT.—*Ibid.*

Dr. Robert Bruce read before the Medico-Chirurgical Society of Edinburgh, the history of a case of croup occurring in a woman aged about twenty-five years. The symptoms and course of the disease resembled very much that occurring in the child; false membrane was formed and expelled at different times by coughing. The treatment consisted in leeches to the larynx, followed by warm poultices, inhalation of the steam of hot water, small doses of antimonial wine, and calomel and opium at intervals, moderately full doses of solution of muriate of morphia, warm bath, and nitrate of silver locally. There are some points of interest connected with this disease as it occurs in the adult, and the most important one may be found in the fact that the greater width of the air passages, the superior strength and intelligence of the patient, enabling him to free himself of the viscid secretion, help to render the disease far less dangerous in the adult than in the child. The moderation of the symptoms presented in this case led the writer to entertain the idea, that possibly cases of croup in the adult are not quite so rare as has commonly been supposed; many cases passing under the name of severe cold or catarrh, which in the narrow trachea of a child would be confirmed croup, owing to the inability of the little patient to throw off the secreted fluid before it forms a film or membrane. It is ascertained that, in children, males are more frequently attacked than females, while in the reported cases of adults the majority are females. The lesser degree of development of the female larynx may, in a measure, account for the latter fact.

Acute Dysentery.—*Ibid.*—Dr. R. W. Cunningham, of Lucknow, reports on the treatment of dysentery by ipecacuanha, after the plan advocated by Surgeon Docker, previously noticed at some length in the Med. Times. He thinks by waiting an hour after giving the tr. opii, the ipecacuanha is retained longer, and produces a much more powerful effect. His success and confidence in the remedy fully correspond with what has already been reported. He regards the ipecacuanha as producing the same relaxing effect upon the mucous membrane of the bowels, that it does upon the system at large, producing a copious flow of secretions from that membrane, relieving it from the tension caused by the congestion and effusion of lymph, thereby preventing destruction of tissue, and ulceration; the nausea overcoming the spasmodic action of the muscular coat, sufficient cathartic effect is produced which, though it may continue for days, is mild, and neither constipates nor debilitates the bowel after it has ceased. Of all his cases not one had a relapse. He recognises the advantages of this method in the hands of the Army Surgeon, viz. that the patient is under treatment from the commencement of the disease, the period to which this remedy seems best adapted.

On Erysipelas and its Treatment by the Perchloride of Iron.—By William Pirrie, M.D., etc.—*Ibid.*—In the treatment of erysipelas, Dr. P. takes a position between two extremes, and while he condemns blood-letting and other powerful antiphlogistic measures formerly so popular, he, on the other hand, questions the propriety of that over-stimulating plan so strongly advocated by some at the present day as indispensable. He would first remove, as speedily as possible, any existing internal source of irritation, by correcting any hepatic or alvine disorder; he would establish a thorough ventilation so far as to insure an equable temperature; and early resort to such remedies as give tone to the system and uphold the vital powers. To guard against the early depression of various parts of the organism, the energy of the nervous system becoming rapidly exhausted, the vigor of the muscular system impaired, the tone of the vascular system lowered, the capillaries relaxed and serous effusions quickly ensuing, he has been induced to try what success would attend the administration of the perchloride of iron, and after giving it a fair trial in five successive cases, reports the effects which followed, with a hope of inducing others to make the same trial and compare the effects produced in different cases, that means may be acquired of arriving at some definite understanding as to its real value. In all the cases in which he used it, he seems highly gratified with the result. "The febrile condition seemed in all to be relieved, the frequency of the pulse reduced, the powers of the system generally upheld, and the stomach and bowels in no way irritated." Headache and sensorial disturbance seemed to diminish under its use, and the serous effusion was less copious, and disappeared much more quickly than is usual in equal cases. These two circumstances he mentions as deserving particular attention. The dose he uses varies from fifteen to twenty drops every two and a half or three hours, until convalescence is fairly established, after which the dose is greatly reduced, and spiritus mindereri ordered, which acts as a very gentle stimulant to the nervous and vascular systems, a mild diaphoretic, and an unirritating diuretic. Should the lowering effects of the disease become so great, and the failure of the vital powers so strongly marked as to imperatively call for the use of some powerful stimulant, the remedy should be selected with the greatest caution and judgment, having particular regard to the situation of each individual case and the previous habits of the patient. During the employment of the iron the bowels should be acted upon from time to time by some gentle laxative.

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California Volunteers.—"There are some half-a-dozen encampments of volunteer soldiers in the suburbs of the city—generally in a good sanitary condition. We hear of no deaths among the volunteers during the month. The Medical-Director, Surgeon McCormick, causes the volunteers to be attended daily by capable physicians from the moment they go into camp until commissioned Surgeons and Assistant-Surgeons are assigned to the various regiments and battalions. They are immediately supplied with medicines and hospital stores. The volunteer department, at least the medical department, works with the promptness and regularity of regular encampments and military posts. The recruits look healthy, well fed, well clad, and contented. Order and discipline, so essential to the health of the soldier, seem to be maintained from the start, by a kind of intuition and intelligent and mutual consent."

American Medical Times.

SATURDAY, NOVEMBER 23, 1861.

ASYLUMS FOR INEBRIATES.

The recognition of the fact that those inebriates who have been considered hopelessly devoted to their cups, are laboring under a species of insanity which requires their restraint, will form the brightest feature of our civilization. They pervade all ranks of society, and have hitherto, like lepers, been regarded as outcasts, for whose relief the grave was the only asylum. Whatever might be the social position of the dipsomaniac, a more pitiable object in human shape could not be conceived. Disease, in its most revolting forms, had far more mitigating conditions than that fatal passion which clung with resistless grasp to its victim. The former might waste the body, and render life intolerable by suffering, but leave the intellect undisturbed, and allow the affections to have full and natural play. But the latter not only gradually obliterated all traces of original manhood, but turned the affections into fiendish passions, and submerged the intellect in the muddy waters of idiocy. It is not every tippler, or even drunkard, that is a dipsomaniac, but it is the man over whom appetite has so far triumphed that he can no longer voluntarily resist the temptation. Says **Dr. Peddie**:—

> "There is—especially in persons of a nervous or sanguine temperament, and more readily in women than in men—a condition in which the mere vice is transformed into a disease, and the mere vicious habit into an insane impulsive propensity, and then the drunkard becomes a dipsomaniac. * * * He becomes destitute of any command over his own will, of all ability to resist the craving, and he is transformed into the involuntary slave of an insane propensity. Physically, the dipsomaniac is truly lamentable to behold, with his general broken-down aspect, feeble, tremulous limbs, pale or leaden-colored visage, and watery, lustreless eye. But in the manifestations of mind and heart, the degradation is still more apparent and mournful. His habits of drinking are not now social, but solitary. He no longer drinks from mere relish for the liquors, but yields to a desire which is insatiable—giving himself up to a demon which has taken body and soul into subjection. Intelligence is extinguished; the best affections of the heart are deadened; the moral feelings are perverted; the dearest social ties no longer restrain him; truth is no longer a principle of action. He cannot now control his conduct or manage his affairs; he is useless or dangerous to himself or others; disqualified for social and civil duties, a wreck of humanity, and a burden on society."

But this affection may be hereditary, and thus resemble a constitutional disease, and especially insanity. It is no uncommon thing to find in the family of the confirmed drunkard, children early assuming the habits of the parent, and exhibiting the most uncontrollable passion for ardent spirits. The vice of the parent seems also to exist in a twofold intensity in the offspring. The latter is early lost to all sense of shame, and every influence is powerless towards reform. But whether acquired or hereditary, the disease is essentially the same, and requires the same remedial measures. It is interesting to notice that **Dr. Rush** entertained the most positive views in regard to the insanity of inebriates from diseased conditions. He considered them "as fit subjects of hospital treatment as any other class of madmen." "They are monomaniacs—the subjects of physical disease located in the brain. At first, their drinking is the fruit of moral depravity, but when long indulgence in this vice has produced disease of the brain, then is their drinking the result of insanity."

The remedy for this deplorable malady has long been sought in vain. The great temperance movement inaugurated under the motto "Teetotalism" established one important conclusion, viz. that the most inveterate inebriate may be rescued if the temptation is wholly and for a long time removed. But the reformers trusted at first to the resolution of the reformed solely, and the trial necessarily proved, in the vast majority of cases, a failure. Few were found sufficiently strong to resist the temptation, which allured them on every hand, to assuage the fever which raged consumingly within. The advocates of teetotalism then attempted the removal of the temptation itself, and in this they have been partially successful.

But the great step in this reform was the recognition of the true physical, moral, and psychological condition of the inebriate. That he is an insane person, in every respect that a monomaniac can be so considered, is susceptible of demonstration. The logical conclusion follows, that for his proper treatment there must be such isolation from exciting causes, and such moral influences as will best promote recovery.

Of the value of Inebriate Asylums, or of the plan of isolation, with proper moral and hygienic influences, we now have practical as well as theoretical testimony. Many persons have been secluded at their own request, and have thereby been saved from destruction. Many illustrative examples might be given of the success which will attend seclusion, but we will only quote from the report made by **Dr. Christison**, of a visit to a private asylum for inebriates in the island of Skye, Scotland. He says:—

> "Here we found ten gentlemen—cases originally of the worst forms of ungovernable drink-craving—who lived in a state of sobriety, happiness, and real freedom. One, who is now well, had not yet recovered from a prostrate condition of both mind and body. The others wandered over the island, scene-hunting, angling, fowling, botanizing, and geologizing; and one of these accompanied my companion and myself on a long day's walk to Loch Corruisk and the Cuchullin mountains. No untoward accident had ever happened among them. I may add, that it was impossible not to feel, that—with one or two exceptions—we were among a set of men of originally a low order of intellect. Radical cures are rare among them; for such men, under the present order of things, are generally too far gone in the habit of intemperance before they can be persuaded to submit to treatment. Nevertheless, one of those I met there, a very bad case indeed, has since stood the world's temptations bravely for twelve months subsequently to his discharge."

The State of New York was, we believe, the first to carry out practically this idea. This was done at the suggestion of **Dr. Turner**, an earnest, devoted, and intelligent philanthropist. The noble institution which is now rearing its stately proportions at Binghampton, N. Y., is the proudest monument which the Empire State can raise to the intelligence and humanity of its people. The pressing importance of this institution is seen in the fact that there have been already 4735 applications for admission. It is with much satisfaction that we witness the rapid extension of this great reform. Other States have taken up the subject, and leading men are earnestly laboring to establish asylums for the inebriate. In Ohio, the Governor has already recommended to the Legislature the founding of these institutions, and we hope soon to learn that that State, so forward in every benevolent enterprise, has its asylums for this unfortunate class.

In Great Britain the reform has taken a strong hold upon the medical profession and philanthropists, and great exertions are being made to obtain such legislation as will enable them to render it efficient and entirely practicable. Dr. Christison, Dr. Peddie, Dr. Mackesey, and others, have brought the subject prominently forward, and none who have read their papers fail to be convinced of the vast importance of the reform. In the British Social Science Association the subject has been largely examined, and we may soon expect to see the fruits of this discussion in the adoption of such legal measures as are required. We cannot close this imperfect sketch of the claims of Inebriate Asylums, and the efforts that are being made to establish them on a firm legal basis, without referring to the eloquent and truthful letter of Dr. Valentine Mott, accepting the office of President of the Asylum at Binghampton, vacated by the death of Dr. Francis. In the present civil war he finds a most cogent reason for renewed efforts in the cause of the inebriate:—

> "I hope the present condition of our country will incite the public to renewed efforts in behalf of this noble charity. War is upon us, bringing in its train not only prostration of material interests, but also wide-spread inebriety and dissipation. In the present excited condition of the public mind, intemperance is alarmingly increasing, and the higher classes of the community are furnishing more than their usual proportion of the victims. From the allurements and degradation of this disease no class in society is free. Men of intellect, men of wealth, men of social position, men of refinement, young men on whom are placed the highest hopes of their parents, and the fondest affections of their friends; husbands endowed with the pure love of woman, and fathers who have in trust the precious interests of their children—are daily joining the increasing procession that moves on to its own destruction, the willing minions of a fatal enchanter. While possessed by this enchanter, no moral influences reach them. Like the lotus-eaters of old, they are deaf to the most eloquent pleadings of family and kindred. Let us then persevere in our efforts to erect an asylum for the control and medical treatment of the inebriate, in which shall be found all the medical appliances that science and humanity can furnish—let us build its walls so high that no temptation from without can gain ingress; and make its atmosphere so pure, that when the unfortunate subject is once admitted the Demon shall be exercised and take to his 'wings and flee away.' Here shall the Goddess Hygeia minister to the weak and bruised heart, and under her gentle tutelage the virtue of faith and hope and love will again spring up and adorn the man, and give him strength to return to the world, even as the locks of the Hebrew champion, though treacherously removed, grew again and conferred on him his former power."

THE WEEK.

Village Hospitals do not receive the attention that they deserve. In the larger inland towns devoted to manufactures these institutions would be of incalculable service; first, to the families of the laboring classes, in ordinary cases of sickness, and secondly, to those who are the subjects of severe injuries. The great mortality from diseases among the poor arises from the negligence of this class to provide for the wants of their sick, as much as from their pecuniary inability. It would be a great blessing if a small hospital, being a cottage building located in a healthy part of the town, were provided for them, where at small expense they could send their sick, and have them properly cared for both by nurses and physicians. And especially would such a village hospital be of value to those who are the subjects of severe injuries. At present, most accidents among the laboring classes in country towns are transported to the cities, often from long distances, and always at great inconvenience. This is wrong, first, because the life of the patient is seriously endangered by being removed from the country to the wards of a crowded city hospital, and, secondly, because it takes from the country surgeon a class of cases which he is able to treat to greater advantage, both to the patient and himself. Our attention has again been called to this subject by noticing the annual report of the "Cranby Village Hospital" (Eng.) to which we have already alluded. It has six beds, and during the past year treated twenty-three cases, which would have been sent to the London hospitals. It is in a measure self-supporting, the rule of admission being, "Patients shall be received on payment of a weekly sum, the amount of which, dependent on their circumstances, is to be fixed by their employer, in conjunction with the manager of the hospital." We commend this subject to the consideration of country surgeons.

We learn from the *Boston Medical Journal* that Prof. O. W. Holmes, in his late Introductory Lecture to the course of the Harvard Medical School, did not omit "to refer to the great improvements in modern surgery over the barbarism of the ancients; and he urged the importance of the study of nature's laws in the practice of medicine. In this connexion he used an illustration which, literally interpreted, like an epigrammatical expression employed by him on another occasion not a great while since, would, we are confident, convey a false impression of his belief in the efficacy of medicine in the treatment of disease. Such expressions grow out of the habit of a man's mind, and should be interpreted in the light of this fact." Dr. Holmes is a most unfortunate man. Being a professed punster, we can never understand precisely what opinion he intends to convey. But a year ago, he astonished the medical profession by his sceptical opinions of the efficacy of drugs. Members of the society before which the address was delivered so understood him, and protested, at its conclusion, against its publication. Newspapers throughout the country, elated at such confessions, paraded extracts from the address as conclusive proofs against the value of medicines, and made their comments derogatory of the medical profession. But we were soon after informed that the orator did not *intend* to convey any such impressions; such expressions grew out of the habit of the man's mind, and should be interpreted in the light of this fact. The medical profession charitably accepted the explanation, but the public did not; the latter took Dr. Holmes at his word, and still believes that he expressed his personal convictions. Great harm was done by that address to the country practitioner. In his daily visits he had constantly the mortification of listening to the reading of a paragraph from the village paper, headed "Oliver Wendel Holmes's Opinion of Allopathic Practice." We regret that Dr. Holmes has again committed the indiscretion of advancing publicly an opinion which is liable to misconstruction. The medical profession will soon grow weary of interpreting his expressions in the light of the habit of his mind, and construe his language, as does the public, literally.

Excision of the head of the femur is just beginning to excite attention in France. A memoir has recently been read before the Academy of Medicine strongly urging the operation, and condemning French surgeons for their neglect of a method of cure so successful in the hands of the surgeons of other countries. To this one of the members replied, "that if hip-joint excision has been frequently performed in Germany, England, and America, this circumstance depends either upon the fact that severe cases of coxalgia, without serious constitutional disturbance, are of more frequent occurrence in those countries, or else that the disease is better treated in France than elsewhere, or it may be that such operations are undertaken too lightly." It is very doubtful if either of these explanations is correct. Hip-joint disease is frequent in France, and the sad results which follow are not infrequent. They have no method of treatment which compares with that put in practice in this country by extension and counter-extension. Exsection is not adopted, simply because it did not originate with the French surgeons.

All who are interested in military surgery will welcome an American edition of Macleod's excellent *Notes on the Surgery of the War of the Crimea.* The English edition is difficult to obtain, commands a high price, and is not very portable. The American edition will be of a more convenient size for the army surgeon, and at a greatly reduced price. There is no work on military surgery in the English language now in greater demand. It presents in a small space a large amount of information, necessary for the army surgeon. The location, arrangement, hygiene, and diseases of camp, and all the questions relating to the surgery of the field, are discussed by one of large experience and sound judgment.

A New York correspondent of the London *Standard,* in describing a visit to a Lunatic Asylum, makes the following allusion to a medical man well known to the profession of this city:—

> "After we had seen most of the females, we passed into the building devoted to the male maniacs. Almost the first man my eyes lighted upon was an old friend, Dr. H——, who, singularly enough, was at one time the head of the Bellevue Hospital, and had thousands under his charge. No one was more respected. He left medical life, and started a paper at Fishkill. A few months ago the mob went to his office, and dragged him out, on account of a Secession article that had appeared in the columns of his paper. The effect has been terrible. He is a hopeless maniac, but harmless. He sits upon a bench, looking an object of despair. He gazes wildly in the direction of a voice, but makes no reply. He is unconscious of anything."

Death of M. Scrive.—This distinguished military surgeon died at Val-de-Grace, at the early age of forty-six. He was Surgeon-in-Chief of the French Army during the Crimean war, and won universal praise for his probity and efficiency.

Medical Students in England.—The number of registered students this year is 1116 against 1228 last year, showing a decrease of 112.

Correspondence.

MINERAL SPRING IN NEW HAMPSHIRE.

[To the Editor of the American Medical Times.]

Sir:—The recent publication in your journal of Dr. Hanbury Smith's excellent papers on the use of Medicinal Waters, encourages me in an effort to draw the attention of the profession to a chalybeate spring easily reached from New York, and almost unknown to the inhabitants of this city. It is situated about one mile from the village of Walpole, Cheshire County, New Hampshire, the supply of water remarkably abundant, and the charge for drinking—*nothing.*

In order to show the character of this water, the following extract from an analysis by Dr. A. A. Hayes, Assayer of the State of Massachusetts, may, with advantage, be introduced: "It contains, as the most characteristic ingredient, oxide of iron, united to an organic acid known as crenic acid. In this compound, the oxide of iron exists in its proto, or least oxidized state, and is in that condition which enables it to most easily enter the human system as a remedial agent. In the division of medicinal waters, this belongs to that of the chalybeate, or ferruginous, *and differs from many of these in having no gaseous sulphuretted acid, contained in it.* I have analysed samples of this water taken at different seasons of the year, and between these samples there have been such corresponding results as show that the salt of iron always exists in it, and the proportion continues nearly the same, unaffected materially by wet or dry seasons."

Dr. Hayes further states that, forty gallons of this water examined by him contained, in addition to nitrogen, oxygen, and carbonic acid gases, 13·34 per. cent salts, which were composed of—

Crenate of Iron, ...	7·10
Crenate of Lime, ...	4·11
Chloride of Sodium, Sulphates of Soda, Lime, and Silica, ...	2·13
	13·34

During my stay at Walpole, in the summer of 1860, I did not have an opportunity of confirming Dr. Hayes' analysis; but from my own experience I can heartily join in his expressed opinion that "this will be found a valuable medicinal water." The prostration resulting from an attack of acute peritonitis induced me to go there, and the occasional walk to the Abenaqui Spring, together with draughts of Abenaqui water, I am convinced contributed in a great degree to my recovery.

I am induced to send you this very egotistical communication, because it seems to me that this spring has advantages not possessed by others, which I have discovered by personal experience; 1st. There is a very good hotel at Walpole, kept by Mr. Makepeace; 2d. The air of the place is wonderfully pure and bracing—equally so with that of any mountain resort with which I am acquainted; 3d. The Abenaqui Spring is only about a mile from the village, affording a pleasant and healthful stroll; and 4th. The water is a chalybeate of considerable strength, bountiful in its supply, and merely costing the effort of dipping a drinking-glass into the spring.

Yours, etc.,

C. Van Alen Anderson, M.D.

DOUBLE VISION FROM INJURY OF HEAD.

[To the Editor of the American Medical Times.]

Sir:—The following case of double vision, which has lately come to my notice, is a peculiar one to me, and in the hope that it may prove such to some of your readers, I cheerfully place it at your disposal:—

Mary McDonald, aged 12 years, while carrying a pitcher of milk, was thrown down on the sidewalk by a dog running against her; she walked home, but felt herself weak. Shortly after reaching home she commenced to vomit. This occurrence took place on Saturday evening; I saw her early on Monday morning. She was vomiting considerably—face pale, pain in head, but not severe; pulse regular and rather slow, not over sixty-five; bowels confined. I concluded that vomiting arose from concussion, and accordingly ordered one leech behind each ear; powders of calomel and scammony every two hours till bowels were freely moved; also, sinapism to nape of neck. On Tuesday, the vomiting was relieved, pain in head diminished, and bowels were freely opened, skin cool. On looking at me, she said that I had two heads and that her mother had the same. I closed one of her eyes, she then saw only one head and face; I shut the other eye, she saw me equally as well. On holding up a finger, she saw two with both eyes, one finger with one eye; pupils contract and dilate regularly. I ordered a leech to each temple, bowels to be kept regular with "black draught." The day following, she was very much improved, and the double vision had all disappeared. She continued convalescing, and is now entirely well.

Yours, etc.,

John Burke, M.D.

Nov. 1861.

FOREIGN CORRESPONDENCE.

PARIS.

LETTER FROM C. Y. SWAN, MD.

Oct. 10, 1861.

[To the Editor of the American Medical Times.]

Sir—I told you in a preceding letter that M. Maisonneuve intended to amputate limbs by means of his caustic arrows (*caustique en flèches*), and that the reason he would prefer them to écraseurs and catlin(g)s was because no bad accidents ever ensued upon their use for the destruction of tumors.

He has kept good his promise, for last week he essayed this novelty in surgery, and unfortunately or fortunately (decide for yourself), it was without success—the patient died; of course no other result could have better pleased the neighbors of Maisonneuve. In justice, the death argued nothing against the method of operating, which the facts readily prove. The case was one of Hospital gangrene, situate on the hand, already extending up the arm, and already the system poisoned; when Maisonneuve, knowing that amputation after the ordinary manner would be certainly fatal, broke the bones and transfixed the arm at the same point with a fence of *flèches*. Death followed, but the operation bore no relation to the cause.

Some other inventions by the same surgeon will perhaps appear more refined, and therefore more acceptable to American hands. These are for Urethrotomy and Tracheotomy. The former has been already well tested and its superiority proved; for the latter I cannot say so much, as it is but a few days old. The advantages claimed for the Urethrotome are, 1st. That the operation is rendered safe and simple. 2d. That the operator feels positive that he cuts nothing but the stricture itself. 3d. That there are no serious after effects. The mode of operating is as follows: The stricture must be passed, and for so doing a fusiform bougie is first introduced, to which is then screwed a catheter equally fine, having an open seam its whole length. The fusiform bougie coils itself in the bladder, its duty being finished after having conducted the fine catheter through the stricture. The stylet is then put in, and the blade, much too large to be *contained* in so small a catheter, by means of the slit, travels outside, apparently very much endangering the urethral membrane. The membrane though, elastic as it is, is uninjured, owing to the blade being without edge except at its extremity, and consequently all parts, and they only, that resist get cut. The blade resembles the half of an oblong lozenge, and not much sharper except at the bow. Still better, perhaps, I might compare it to a little boat which, starting from the meatus, sails down the canal steered safely by stylet and catheter. If any obstacle is met with it tries to push it aside, and if impossible, the bow cuts the way. It is thus evident that the blade, by its conformation and undeviating guidance by the catheter, cannot cut anything but that which is desired, namely, the stricture. Spasmodic stricture will not be cut by it, from which it would almost appear as if the instrument was endowed with instinct. The operation is almost painless, so much so that in several instances the patient has been allowed to operate on himself. M. Maisonneuve states that he cuts strictures in his office, and lets the subjects walk to their home, the same as though he had only made an injection. There has never been a serious hemorrhage or accident of any nature following his operations.

The Tracheotome enables the surgeon to operate with the greatest ease and despatch. I can't say that the danger of hemorrhage is rendered less likely than by the old method, but sometimes rapidity of execution is quite as important as the avoidance of hemorrhage. It is not yet perfected, but thus far the instrument may be compared to a curved needle held in a pair of forceps at right angles, as is commonly done in stitching wounds. Suppose the needle to have but one edge, and that on its concavity instead of sides, an arrow point, and about one and one-half inch long. This cutting needle is firmly fastened to a handle at right angles, not unlike the key of a turnkey. The modus operandi is to pierce through the crico-thyroid membrane, pass down the trachea as far as the length of the blade permits, and most naturally by virtue of the same continued revolving movement the point makes its exit. So far it seems like the third step in ligaturing. Turning further brings into play the edge of the blade which, in cutting the part embraced between heel and point, makes a complete somerset, the point re-arriving a little above where it first entered. But the cricoid cartilage, although embraced by the blade, is not severed, being saved by the bluntness of the heel. A proposed addition to this instrument, now making, is to open the mouth of the wound, and thus with *one single stroke* the trachea is ready for a tube.

Our well known countryman, Dr. Marion Sims, has been well received by the Frenchmen. He has operated at the St. Louis and Beaujon with his customary success, and besides has given demonstrations on the cadaver.

Army Medical Intelligence.

SIMULATED DISEASES.

[To the Editor of the American Medical Times.]

Simulated diseases occupy more or less of the attention of the medical officer in public service, and he is not unfrequently at a loss to determine the amount of exaggeration employed by a patient in relating the nature and severity of an existing disease. The object of a malingerer is, to escape the performance of some disagreeable duty, by getting his name upon the Surgeon's sick-list, which exempts him from all duty; or to secure the comforts of a hospital, or discharge from the service.

The discovery of the true condition of such imposters is necessary in order to prevent the medical officer from being made a dupe, and in doubtful cases to save him from the charge of ignorance and injustice.

The disease most commonly feigned is Rheumatism, and of all affections it is the most difficult to be detected, because the non-existence of pain cannot be proved, as it is a well known fact that a considerable amount of pain may exist, without any appearance externally. The whole history of that increasing class of diseases termed neuralgia proves this.

Internal pain is usually accompanied by symptoms which are not easily assumed. For instance pain in the head is accompanied with loss of sleep, dizziness, and fever; in the chest with cough and difficult respiration; in the stomach with cold sweats, cold extremities, and aversion to food; in the intestines with flatulence, diarrhœa, or obstinate constipation; in affections of the kidneys and bladder, the urine is high-colored and deposits a sediment, and sometimes mixed with blood, or there is ischuria or dysuria. Dr. M. Hall observes, that in general, the brow is contracted by pain within the head, the nostrils are drawn acutely upwards by pain of the chest, and the upper lip is raised and stretched over the gums or teeth in painful affections of the abdomen. Debility is a symptom of disease easy of pretension, and the deceit is not very readily discovered, still it requires an artful impostor to imitate the fully formed and general asthenic condition. The pale features, anorexia, general muscular debility, a weak and nearly lost voice, the languor, exhaustion, headache, and tendency to fainting, are easily imitated. Such cases should be carefully examined. Pallor and emaciation are too easily produced to be taken as evidences of disease.

W. K. Scofield, M.D., U. S. N.

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METHOD OF WARMING TENTS.

[Army Correspondence of the American Medical Times.]

Although the weather is already quite cold, and winter is rapidly approaching, the vast majority of hospital tents are not supplied with stoves, and the exigencies of the campaign may prevent, at least partially, their being always supplied. An expedient, which I have devised for warming our hospital tent, has been attended with such complete and gratifying success as to induce the belief that its publication may be the means of alleviating the sufferings of many sick and wounded soldiers. Eighteen inches from the inner wall of the tent I began a trench, extending outwardly, six feet long, nine inches wide, six inches deep at the outer, and twelve inches deep at the inner extremity. At the inner end a semicircular excavation, two and a half feet in diameter and fifteen inches deep, was dug. The trench was then covered from its inner, to within eight inches of its outer end, with flat stones, selecting a large one for the front. A chimney of stone, eighteen inches high, was then raised around the outer end of the trench; the stones composing it, and the trench cover, being covered with earth sufficiently deep to close all the crannies. Two empty barrels with both heads knocked out were then placed on top of each other and the stone chimney, and secured by leaning sticks against them. Empty barrels can generally be obtained about a camp; should they not be obtainable, the chimney could be raised sufficiently high with stones, rods, or sticks laid crosswise, and plastered with mud. This simple yet effectual mode of warming a hospital tent may not occur to all the medical staff, hence I send you this, hoping it may contribute to the welfare of our soldiers.

Respectfully yours,

J. P. Phillips,

Assist. Surgeon, 37th Reg., N. Y. V.

Medical News.

Blunders in Pharmaceutical Directions.—A prescription was written for a lady, and in the directions for taking the medicine it was stated that each dose was to be followed by a draught of "*species ad decoctum liquor.*" This latter puzzled the compounder, but, after profound reflection, he hit upon what he thought an agreeable and satisfactory translation, the carrying out of which might safely be left to the patient's liking. The medicine was accordingly sent bearing the following directions upon the label "xxx drops to be taken 3 times a day, and followed by a *glass of hot punch.*" Unfortunately (or perhaps fortunately for the joke it affords) the patient happened to be a lady of strict temperance habits, and was quite shocked at the idea of sitting down to "a glass of hot punch," three times a day, of which course of dissipation she averred the Dr. had made no mention. A message was accordingly dispatched to the Dr. to inquire if a cup of good tea would not answer in place of the "punch." The physician was nonplussed at first, feeling doubtful of the sanity of his patient, but recollecting the character of her mind, contended himself with recommending that the *punch* should be dispensed with until he had seen his patient. Upon calling, his astonishment may be better imagined than described, when he found upon the label of the bottle the directions as given above. After quieting the anxiety of the lady, he forthwith waited upon the druggist, who confessed the difficulty under which he had labored, and submitted the copy he had made in his book, *the original recipe having been destroyed*, of what he thought the directions should have been. Judge of his amazement and amusement to find the following: "To be followed by a draught of "spiritus ad decoct. liquor," or, as he had freely interpreted it, "hot punch." It was claimed on the part of the compounder that he was assisted in his translation and mystification by a son of Æsculapius who betimes loses his head at the shrine of Bacchus, and in this way accounts for the *spirited* translation produced. We would, however, add, *Hæ nugæ in seria ducant mala.—Brit. Am. Med. Jour.*

Registrar-General's Report.—The Registrar-General for England has issued his report for 1859—the 22d annual report. It tells us that the twenty-two years show that on the average there is one death in a year to every 45 persons living, one birth to every 30, one person married to every 61. Of the marriages at church in the year 1859 those by banns were to those by license as 5·296 to 1; and these may be taken as the proportions of the marriages of the higher and middle classes and of the artisan and other classes respectively. But of the 167,723 marriages, 31,513 were not celebrated at church. Of 100 men marrying, 14·10 were widowers; of 100 women marrying, 9·07 were widows. Of 100 men 6·20, and of 100 women 19·10, were minors. These proportions increase year by year; twenty years ago, in 1841, they were only 4·38 and 13·29; they are the greatest in Staffordshire, Durham, and some of the South Midland counties, where there is profitable work for young persons. Happily, there is also a constant increase in the proportions who are able to sign their names on the marriage register; in 1859 the proportion of men who signed by mark was only 26·7 in 100 marrying, and of women 37·6; in 1841 the proportions were 32·7 and 48·8, so that six per cent. mor emen and 11 per cent. more women now write their names. But in Staffordshire, even in 1859, the proportions that could not write were no less than 41·7 and 53·2, and in Lancashire 55 per cent. of the women who married signed only by mark. Of the births we learn that 44,751 children, 6·5 per cent. of the children born alive and registered, were born out of wedlock; but, as we lately mentioned, allowing for unregistered births, the real number is larger, and is probably from 8 to 9 per cent. of all the children born alive. To every 100 women living of the age 15-45 there were 14·9 births in the year, and this proportion is slightly increasing; in 1841 it was only 13·4. The women who bore children in the year were 15·2 of every 100 women (of that age) living. Of the deaths of 1859 we find that the rate in the chief towns was 2·386 per cent., in the small towns and country districts 2·091; the former rate was below, the latter above the average. Of every 100 male children under five the mortality was 7·589 per cent., of 100 female children 6·665—rates higher than the average. At the close of 1859 the aggregate number of names on the register of births, deaths, and marriages, which commenced in 1837, was 28,065,538. —*British Medical Journ.*

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture VII., Part I.

Exaggerated Vesicular Murmur.—Weak Respiration.—Suppression of Respiratory Sound.—Shortened Inspiration in Emphysema and in Bronchial Respiration Contrasted.—Prolonged Expiration in Emphysema and in Bronchial or in Broncho-Vesicular Respiration Contrasted.

Gentlemen:—In my last lecture I considered several important morbid signs obtained by auscultation, viz. the bronchial, broncho-vesicular, and cavernous respiration, including the variety of the latter called amphoric respiration. The characters which distinguish all these signs from the normal vesicular murmur, involve differences relating to intensity, pitch, quality, and rhythm. I shall now speak of several signs which are modifications of the normal vesicular murmur only as regards intensity or rhythm, the characters of the normal murmur in other respects not being essentially altered.

And the first of this group of signs is exaggerated vesicular murmur. The abnormal characteristic of this sign consists, exclusively, in augmented intensity; the pitch, quality, and rhythm are the same as in health.

How can we determine that the murmur is abnormally exaggerated, since, as has been already stated, the intensity differs widely within the limits of health? We cannot say that the murmur is ever exaggerated so long as the normal symmetry of the two sides of the chest, in this regard, is preserved. The sign, as a rule, exists on one side only, and in this instance the sign is on the healthy side. Whenever the function of one lung is greatly diminished or arrested, the murmur from the opposite lung becomes intensified. This occurs in pleurisy with large effusion, in cases of pneumonia, especially if an entire lung be involved, and in bronchial obstruction on one side. The exaggerated murmur is sometimes called puerile respiration, because it resembles the intense murmur of early life; and it is called also supplementary respiration because the increased intensity is supplementary to diminished or arrested respiration in the other lung. As a sign, it is not of great practical value, and only claims a passing notice.

Diminished intensity of the respiratory murmur, or weak respiration, without any change in pitch or quality, occurs in various affections. It occurs in cases in which the air-tubes are obstructed either by morbid products or foreign bodies within the tubes, and from pressure on the tubes from without. The presence of mucus, in some cases of bronchitis, diminishes the column of air passing to the air cells so as to weaken the murmur; and, according to the situation of the mucus, this result will be general or limited; it may affect the murmur in both lungs; in the whole of one lung; in a single lobe or in a portion of a lobe. When a foreign body is drawn into the air passages, if it remain lodged in the larynx or trachea, the murmur on both sides will be weakened; but if it lodge in the primary bronchus on one side, the murmur will be weakened on that side, and probably be exaggerated on the opposite side. The fact that the murmur is weakened on one side in these cases may be of importance, in the first place, as leading to the conclusion that a foreign body has been drawn into the air passages, when the patient is a child too young to give us any verbal information; and, in the second place, it is a guide to the situation of the foreign body, showing that it is in either the right or the left bronchus. The latter is important information for the surgeon, when it is deemed advisable to open the trachea to extract the foreign body.

Diminished intensity of the respiratory murmur occurs also when the free passage of air from the bronchial tubes into the air vesicles is obstructed by the permanent dilatation and distension of the latter with air in emphysema. Feebleness of the respiratory murmur, without any marked change as regards quality or pitch, in conjunction with an exaggerated vesiculo-tympanitic resonance on percussion, and certain appearances on inspection, characterizes this affection. But, in addition, there is often a certain change in rhythm, of which I will presently speak.

If the lungs are separated from the thoracic walls by a thin stratum of liquid or air, but not removed far enough to suppress all respiratory sound, or to condense the lung sufficiently to give rise to the bronchial or broncho-vesicular respiration, the respiratory sound is simply weakened.

Again, when the thoracic or diaphragmatic movements are restrained or enfeebled, the respiratory murmur is proprotionally weakened. This occurs in cases of hemiplegia in which the thoracic movements on the paralysed side are impaired; and it occurs when the movements on one side are restrained by pain, as in cases of pleurisy, pleurodynia, and intercostal neuralgia.

Suppression of respiratory sound, or silence, may occur under most of the same circumstances which we have just enumerated as diminishing the intensity of the murmur. The air passages may be so obstructed that either no murmur takes place, or it is everywhere inappreciable. This occurs in certain laryngeal affections, viz. acute laryngitis, croup, morbid growths, and œdema of the glottis. In these affections the murmur will be more or less weakened, or suppressed, according to the amount of obstruction, and the effect will be equal on the two sides of the chest. Here let me state that in these, and other affections in which the air passages are obstructed, we can form a better judgment of the degree of interference with the function of respiration, by listening to the respiratory murmur, than by the manifestations or expressions of suffering. Different persons suffer differently with the same amount of disturbance of this function. Some persons, too, are so constituted as to complain or exhibit signs of great distress with an amount of disturbance which others will bear uncomplainingly and with comparative indifference. So long as the respiratory murmur is well evolved over the whole chest, we may conclude that the respiratory function is not compromised to such a degree as to involve immediate danger.

Suppression of respiratory sound on one side occurs when the primary bronchus on that side is completely obstructed, or nearly so, by a foreign body or the pressure of a tumor. It may occur over a limited portion of one side when some of the subdivisions of a bronchus are occluded with mucus in certain cases of bronchitis. It may occur over more or less of either side, or of both sides, in certain cases of emphysema. In all these instances, with suppression of the respiratory sound, as also, of course, when for similar reasons the murmur is more or less weakened, but not suppressed, percussion does not yield dulness nor flatness, and in emphysema the resonance is generally exaggerated.

Suppression on one side generally occurs when the chest on that side is filled with liquid, and usually the murmur is absent below the level of the liquid when it occupies only a part of the intra-thoracic space. Under these circumstances, absence of respiratory sound co-exists with marked dulness or flatness on percussion. The same holds good when the intra-thoracic space is occupied in part, or entirely, by a tumor.

As an exception to the rule, the respiratory sound is sometimes suppressed over solidified lung, as in cases of pneumonia; absence of the sound will then be combined with flatness on percussion, or dulness, the resonance which is present, if dulness exists, being tympanitic in quality. I say suppression is an exception to the rule over solidified lung. We may expect, in the great majority of cases, to obtain the auscultatory sign of solidification, viz. the bronchial respiration.

Let me now describe the rhythmical change which frequently occurs in cases of emphysema. The inspiratory sound is not only weakened but shortened. It is shortened because it does not begin with the commencement of the inspiratory act; the act continues one-quarter or one-half, or even a greater fractional part of its duration before the sound begins. The inspiratory sound is said to be deferred. The shortening is the reverse of that which occurs in the bronchial respiration. In the latter, the inspiratory sound is shortened, because it ends before the termination of the inspiratory act; the inspiratory sound is then said to be unfinished. Moreover, as another point of difference, the deferred inspiratory sound of emphysema does not lose the vesicular quality, and preserves the pitch of the normal murmur, while the unfinished inspiratory sound in the bronchial respiration becomes tubular in quality and high in pitch.

The expiratory sound in emphysema is often prolonged. Owing to the prolongation and the shortening of the inspiratory sound, it may be considerably longer than the latter, and it is also apt to be more intense. Now, this prolonged expiratory sound in emphysema differs from the prolonged expiratory sound in the bronchial or the broncho-vesicular respiration, in this: it is unchanged save in length and intensity, *i. e.* the pitch is unaffected, while in the bronchial or the broncho-vesicular respiration, it is not only prolonged but raised in pitch. The pitch of the prolonged expiration in emphysema is always lower than that of the inspiration, while in the bronchial and broncho-vesicular respiration it is higher than that of the inspiration. I wish to call your attention particularly to this point of distinction, for I am not aware that it has been pointed out except by me. By means of the pitch of the sound, a prolonged expiration, if it exist alone, *i. e.* without any expiratory sound, may always be referred, either to a prolonged and forcible act of expiration, such as occurs in emphysema, or to solidification of lung. And cases in which this discrimination is of practical importance are not very infrequent. A prolonged expiration is reckoned among the signs of tubercle. But simple prolongation is not a sign of tubercle unless the pitch of the sound is raised. So long as it preserves its normal relation to the inspiratory sound, as regards pitch, the prolongation is not evidence of a tuberculous or any other solidifying deposit.

Original Communications.

ANÆSTHETICS IN MIDWIFERY,

BEING A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, NOV. 20, 1861.

By B. FORDYCE BARKER, M.D.,

PROFESSOR OF OBSTETRICS IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE, ETC., ETC.

It is now nearly fourteen years since the first use of an anæsthetic agent in obstetric practice. It does not come within the province of this paper to give a history of the discovery of anæsthesia, or of the progress which it made, or of the objections which were at first urged to its use in midwifery. It was at first opposed both on moral and scientific grounds. Even physicians joined in the popular objection that to relieve woman from the pains and pangs of labor, was immoral, and opposed to the express commands of Scripture, because it was said "in sorrow thou shalt bring forth children." But, as Dr. Murphy pertinently remarks, man continues to dine as comfortably as his means permit, notwithstanding it was said, "cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life," and I think I may safely say that the moral objections to the use of anæsthetics are now no longer urged. Many of the scientific objections to their use, founded purely on *à priori* reasoning, have now been proved by clinical experience to be groundless. We no longer hear it urged "that the pain of natural labor should not be annulled because it is calculated to promote the safety of the mother;" or that "it is a physiological relative of the power or force, and the culminating point of the female somatic forces."

It is no longer insisted "that the mother does not encounter danger to her health or life from the endurance of the pains," or that in operative midwifery, especially in forceps operations, "anæsthesia should not be resorted to because the sensations of the patient afford us our best aid for the introduction of the instrument." We now never hear it said, at least by intelligent men, that the use of chloroform in labor leads to the development of puerperal mania or puerperal fever. The time for *à priori* reasoning on this subject has gone by, as from the many thousand cases, in which anæsthesia has been induced in midwifery, it would seem that from clinical experience, we ought to be able to settle all questions as regards the safety of anæsthesia, the choice of the agent to be used for this purpose, the indications for its use, its effect and value in each special indication, and that the proper and safe mode of administration of the special anæsthetic selected should be distinctly formularized. Yet at this day, were a young physician at the commencement of his professional career to seriously set himself to work to get a clear idea of the principles which should govern his practice, by a careful study of all the recent standard text-books, and of the papers which have been read, and the discussions which have taken place before the learned medical societies in different parts of the world, he would find such a diversity of opinion on the part of those whom he had been accustomed to regard as authority, and such a want of everything like settled principle as to the indications for or against the use of anæsthetics, that his mind would surely be left in doubt and confusion. Let him take up, for example, the most recent work by one of our own number, excellent as it is in most respects, he will find after the announcement that "labor is unquestionably a natural process * * * which should be designated in strict physiological language a 'function,' the question is asked whether it is right to interfere with a function, properly so called, as long as its exercise is normal, and within the true record of nature." The answer given is, "I think not." Again, as an argument why anæsthesia should not be employed in a natural parturition, it is said, "the female, at the most interesting period of her life, the time of labor, should, all other things being equal, have her mind unclouded, her intellect undisturbed, her judgment fully adequate to realize and appreciate the advent of a new and important era in her existence, the birth of her child." It is true, a very judicious list of exceptional contingencies is then enumerated, which would *justify* the accoucheur in the administration of an anæsthetic; but they are enumerated as exceptions, and taken in connexion with the author's definition of natural labor in the first part of the volume, the impression left would be one of great doubt and uncertainty as to the propriety of anæsthetics in midwifery.

If he then should examine the most recent English work, he would find chloroform mentioned incidentally as an agent which might be used with advantage in rigidity of the os uteri, in puerperal mania, in convulsions, in forceps cases, and in turning. He would find also valuable additional suggestions by the American editor in regard to its use.

If he then consults the best of the modern French text-books, while he finds it asserted that "accoucheurs who have often used chloroform, are almost unanimous in the declaration that it has never had the least mischievous effect upon the mothers' health whilst in all cases it has spared them the sufferings of the last expulsive pains;" and again, "whatever difference of opinion may still remain respecting the influence of chloroform upon the health of the mother, no one doubts its entire innocence as regards the fœtus," and "that it is especially useful in calming the extreme agitation and mental excitement which labor often produces in very nervous women, in those cases in which labor appears to be suspended or much retarded by the pain occasioned by previous disease, or such as may supervene during labor, and particularly indicated by those irregular or partial contractions, which, notwithstanding the intense and almost constant pain which they occasion, have no effect to advance the labor in spasmodic contraction and rigidity of the cervix uteri, in eclampsia, and in the various obstetrical operations;" still he will find the question suggested whether these advantages are not counter-balanced by serious inconveniences, and whether we are authorized to subject a patient to danger, in order to spare intense suffering, when the regular accomplishment of a function is concerned.

In examining the leading medical journals he finds such high authorities as Dr. Barnes, of London, asserting "that he had witnessed such exceeding prostration, after giving chloroform to facilitate the extraction of an adherent placenta, as for three hours afterwards to make him and another practitioner who assisted, apprehensive of the instant death of the patient;" that "in ordinary forceps cases chloroform was not required either to facilitate the operation or to allay pain;" that "under ordinary circumstances turning could not be regarded as a severe or painful operation, and that in many cases chloroform did not facilitate the operation." He finds Dr. Tyler Smith declaring that "he believed post-partum hemorrhage and retention of the placenta occurred more frequently after its use than without it, and that it is contra-indicated where there was deficient action of the uterus as in feeble and tardy labor from inertia, and in cases where hemorrhage was expected;" while Dr. Kidd, who professes to speak from an experience "of 360 cases of midwifery attended or treated under ether, and 1700 under chloroform," regarded it "as invaluable where there is exhaustion, debility, or shock, the result of great or long continued pain," the very class of cases where we have the most reason to dread and anticipate hemorrhage.

In short, the effect of all this study of authorities upon the young practitioner would probably be to bring his mind to the same result as the Scotchman arrived at, who had heard many sermons on free will and predestination, "you can and you can't, you will and you wont, you shall and you sha'n't, you'll be damned if you do, and you'll be damned if you don't."

The experience of no one individual is sufficient to decide all of the points before alluded to, yet the accumulated observations of all who have had large opportunities will eventually contribute to as fixed principles and rules of practice as can in the nature of things be secured in the science of medicine.

In the minds of most medical men the *danger* involved from the use of anæsthetic agents is the grand question above all others. And here permit me to say, that the danger from their use in midwifery, is a question altogether distinct and apart from that of their use in surgery. There has not yet been reported, nor is there any reason for believing that a single death has ever occurred in midwifery practice from the use of *any* anæsthetic agent, where it has been administered by a medical man; and without being able to give statistical evidence in proof of the assertion, I will express my firm conviction, that it has been administered a greater number of times in obstetric than in surgical practice. There are sound and patent physiological reasons why its use should be much less dangerous in the former than in the latter practice.

1st. The conditions under which they are administered are entirely different. In surgery the anæsthetic is used to give relief from an *anticipated* suffering. In obstetrics it is used to destroy pain already existing. There is no law better known in medicine than that the tolerance of narcotics and anodynes bears a certain relation to the intensity of the pain. One suffering from peritonitis or colic can safely and with advantage take a quantity of opium which would be sure to destroy the life of the same individual when in health. For this reason the risk from such an agent must be very much less in obstetrics than in surgery.

2d. The emotional condition of the subject under the two circumstances differs materially, in the one case tending to weaken nerve force and depress the vital powers, and in the other to secure tolerance of such an agent by stimulating and supporting the same elements. I do not stop here to discuss more fully the influence of the emotions as affecting the vital functions, although it is a subject of great importance, and one well worthy of the careful study of every practical man. For my present purpose, I think that the mere statement of the proposition is sufficient to secure its acceptance by every mind. When a subject is about to submit to any painful operation and an anæsthetic is proposed, there is always more or less dread and apprehension as to the result, to which is often added an anxiety in regard to the effect of the anæsthetic, whether it will really destroy all consciousness of pain; and if so, whether it will not also destroy life. But in midwifery the overwhelming desire is to be relieved from the recurrence of the pains, and when the effect of the anæsthetic has once been experienced, it is again sought for with the greatest avidity and confidence.

3d. In midwifery it is ordinarily unnecessary to carry the anæsthetic to the extent to which it is absolutely essential in surgery. In the former it may frequently be carried to the extent of diminishing or destroying sensation, while consciousness is retained; or, if sleep is induced, it is tranquil not stertorous. But in surgery it is absolutely requisite that the patient be perfectly still, and the anæsthetic must be carried to the extent of complete sopor, the test of which is heavy snoring. Even if it be necessary to carry it to this extent in obstetrical practice, as it may be in some cases of natural labor, and ordinarily when operative measures, either manual or instrumental, are demanded, the two conditions which have been before mentioned as greatly modifying the danger from the anæsthetic still remain. Furthermore, it may be added, that the system is prepared by the previous use of the agent in a less degree, because there is now no emotional resistance to the effect of the anæsthetic.

For these reasons, as well as from clinical experience, I never feel the least anxiety in administering an anæsthetic in obstetric practice, while I cannot divest myself from more or less apprehension when asked to do this by my surgical friends, or by my patients, when dental operations are to be performed. Hence I feel warranted in asserting that the question of anæsthesia in surgery is altogether distinct from anæsthesia in midwifery. In this paper I propose to consider exclusively the latter subject.

As regards the anæsthetic agent, my remarks will especially refer to chloroform, as this is the agent in which I have had by far the larger experience, and I very much prefer it to any other. My reasons for preferring the chloroform to sulphuric ether are the following:—1st. Its odor is to most persons much more agreeable, and it is much less persistent. When sulphuric ether is used, it frequently at first produces more or less irritation of the bronchi, and an annoying cough or choking is excited. The effect of this is bad, both on the patient and the surrounding friends. It excites apprehensions which more or less tend to counteract the influence of the agent from emotional causes. In the lying-in room everything should be quiet and tranquil, and confidence should be inspired instead of anxiety. It is true, this influence is but temporary, but it is better to dispense with it if possible. If sulphuric ether is used for any length of time, as is often necessary in obstetric practice, the room becomes filled with the disagreeable vapor, the inflammable character of which is a consideration not altogether to be disregarded.

2d. A much less quantity of chloroform is required, and its effects are much more rapid. In midwifery this is a very great advantage, for we are saved in the great majority the preliminary stage of excitement, which the ether produces, and we are able to use the agent for each recurring pain, the patient in the interval being comparatively free from the influence of the anæsthetic. Thus, in the aggregate, not only is a much less quantity of the agent required, but the patient is not exposed to the danger from the anæsthetic, if any danger there be, for a much shorter period of time.

3d. By chloroform we are able to regulate the degree to which we may desire to carry anæsthesia, with a certainty and security that is not possible with the ether. In surgery this argument can have no weight because it is always necessary to induce complete anæsthesia, but in midwifery, as has already been stated, this is not desirable. On the contrary it is generally to be avoided. These reasons will be deemed by all sufficient for the preference, if it be conceded that the two agents are equally safe. Now as chloroform has been used in many thousand cases of midwifery practice, and there is an absence of all proof, that in a single instance has death resulted from its use, I think we have in the above reasons good *à priori* ground for believing that it is the more safe of the two agents. The above remarks will apply with equal force to chloric ether; for I presume no one will claim that chloroform diluted with alcohol must be more safe than chloroform diluted with atmospheric air.

In the following remarks I shall aim to point out the indications for the use of anæsthetics in midwifery, and their effect and value in each special indication. The clinical experience on which they are based are 786 cases, occurring as follows:

In 1848,	9 cases,	Sulph. ether.	
1849,	62 “	“ “	18. Chlor., 44.
1850,	17 “	Chloroform.	
1851,	34 “	“	
1852,	37 “	“	
1853,	42 “	“	
1854,	56 “	“	
1855,	52 “	“	
1856,	74 “	“	
1857,	81 “	“	
1858,	84 “	“	
1859,	82 “	“	
1860,	84 “	“	
1861,	72 “	“	
Total, 786		Chloroform, 759.	Sulph. ether, 27.

Of these, 577 were cases of natural labor, occurring in my private practice. The others will be classified under their appropriate heads, and were either cases of difficult labor in my private practice, or in my obstetric service at Bellevue Hospital, or were seen by me in consultation.

In a majority of these cases the chloroform was not carried to the extent of inducing profound anæsthesia. The chloroform was exhibited with the recurrence of pain in such a quantity as to destroy the sensation without overcoming consciousness. The length of time under which patients were kept under its influence varied from a half hour to, in one instance, over twenty-four hours. In most patients, the inhalations were not commenced until the second stage of labor, but where any special indications existed it was given any time during the first stage.

The general physiological phenomena of anæsthesia in midwifery have been so fully and so accurately described by Professors Simpson, Murphy, and others, that I shall not detain the Academy with a recapitulation of them. The psychological phenomena have seemed to depend greatly on the antecedent condition of the patient's mind. If the chloroform was administered solely to relieve pain, and she had no apprehension in regard to danger from its use, consciousness was frequently retained or a quiet and tranquil sleep filled up the intervals between each recurrence. But if previously she had been nervous, irritable, and hysterical, bearing the pains badly, or she had serious apprehensions as regards the effects of the chloroform excited by accounts she had heard of its dangers, she may at first manifest great excitement by talking with great volubility, complaining loudly, and weeping hysterically; but by enforcing the strictest quietude in the room, forbidding all noise and conversation, and at once carrying the patient into a state of profound anæsthesia, this condition is soon overcome, and when once overcome, the degree to which the anæsthesia is carried may be speedily reduced. I may mention here, that I never have, in a single instance, in obstetric practice, witnessed the slightest erotic manifestation while a patient has been either partially or completely under the influence of an anæsthetic. I allude to this because it has been urged with great effect as an objection against its use.

The influence of chloroform on the duration of labor is a consideration of a good deal of importance. In a certain class of cases, I am convinced that its effect is undoubtedly to prolong the labor. These cases constitute a minority, and even in them, I have not been satisfied that this apparent objection was not more than counter-balanced by the advantages obtained from its use. In the first stage, I have seen but two cases in which it seemed to retard the progress of dilatation. In both of these, I felt obliged to continue its use because, if the patient was allowed to come out from under the influence of the inhalation, threatening symptoms of convulsions would at once be developed. Yet, for many hours, the uterine contractions would seem to be arrested at once by the inhalation of the chloroform. In one, the chloroform was used eleven hours during the first stage, and in the other twenty-three hours. The first was delivered by forceps at the end of two hours after the second stage commenced, because the symptoms of eclampsia became more and more marked. In the other, the labor terminated naturally, the second stage lasting five hours and a half. I remained with this patient three hours after the child was delivered. But two hours after I left her she had a violent attack of eclampsia. In the second stage the chloroform seems to retard the labor in a much larger number of cases. In this stage the uterine contractions are assisted by the action of the accessory muscles, which are partly voluntary and partly involuntary. These accessory muscles are the abdominal and pelvic, which are brought into action by the pressure of the child upon the irritating structures of the pelvic cavity, which are abundantly supplied with spinal nerves and thus active reflex action is excited. I am not absolutely certain, but that in some rare instances the forceps have been made necessary from this cause; but I have never yet had reason to regret the use of the anæsthetic on this account.

But in a large majority of cases, my experience would lead me to the conviction that the use of chloroform shortens labor. I will mention in detail the conditions under which it apparently produces this result.

1st. In all those cases where inefficient uterine action results from loss of sleep and exhaustion from a prolonged first stage, I have had this fact absolutely demonstrated, as in the following case, as well as in many others less striking:

Nov. 6, 1849. CASE.—The patient, a primipara, was in the first stage of labor eighteen hours. The second stage commenced with very active and efficient uterine contractions; but after a duration of six hours, they commenced to become irregular in their recurrence and gradually decreased in their efficiency and force, until they almost entirely ceased. The head was pressing the perineum without distending it. By auscultation, I found that the sounds of the fœtal heart were becoming more feeble and increasing in frequency, and on account of the child I determined to deliver by the forceps. This was at an early date in the use of chloroform, and my patient had a great dread of losing her consciousness, but she had a still greater apprehension in regard to the use of instruments. As preparatory then for their use, she consented to inhale chloroform, and came rapidly under its influence, when, to my great surprise, the uterine contractions were at once resumed with great force and efficiency, and the child was born in twenty minutes after she commenced the inhalation of the chloroform. It was at first still-born, but I succeeded in resuscitating it. Since that time, I have repeatedly seen the chloroform act quite as efficiently as an oxytoxic under analogous circumstances as I have seen the ergot. I have recently had a most instructive case which has furnished a new illustration on this point.

Case.—This patient was a primipara also, aged 22, of great moral courage and self-control. She therefore did not send for me until after the first stage was entirely completed, when I learned that she had suffered from regular recurrent pains, sufficient to entirely prevent sleep for more than twenty-four hours. After ascertaining the presentation and position, I at once administered chloroform for the purpose of relieving pain and inducing sleep. A very little sufficed for this purpose, and the labor progressed very slowly but steadily for three hours. After this time, the pains continued with apparently the same force, but the head did not advance. I continued the chloroform for two hours without any change, and I then entirely ceased to give it for one hour, the only effect of which was to keep her awake and permit her to suffer, while the force of the uterine contractions did not increase. I then resumed the chloroform for three hours, the head still remaining precisely in the same position. I now determined to deliver by the forceps; up to this time the chloroform had been used to the extent of relieving pain and producing a tranquil sleep in the interval. As preparatory to the instrumental delivery, I now carried the chloroform to the extent of profound sopor; when at once most active uterine contractions supervened, and three pains were sufficient to complete the delivery of the head. I might multiply my illustrations of this effect by the history of similar but less striking cases, but the above are sufficient to establish the point which I here wish to make.

2d. In rigidity of the os uteri and perineum. In regard to these two points, we find quite a diversity of opinion on the part of obstetricians who are in the habit of using chloroform in midwifery, some asserting that it has a direct influence in effecting relaxation of these tissues, while others affirm that they have not been able to discover that it exerts any influence in this respect. The first condition causes delay in the first stage of labor, and the second delay in the second. I believe the fact to be, that chloroform exerts a most decided influence in overcoming this obstacle in one class of cases. Rigidity of the os results from two entirely different conditions, one of which is speedily relieved by the action of chloroform, while I am not certain that it exerts any special influence on the other. In the one case, it is due to reflex irritation producing spasmodic contraction, which readily gives way when the patient is brought under the influence of the anæsthetic. In the other, it is the result of an antecedent inflammation with an exudative deposit in the areolar tissue, which only yields by a laceration, or what is very much better, an operative procedure, incision. In those cases where it is the internal orifice, which, by its retraction, retards the delivery, the chloroform almost invariably obviates the necessity of the forceps. I think this fact is quite sufficient to counterbalance the objection before alluded to, that it may in some rare cases create the necessity for these instruments.

But this point becomes still more manifest when we refer to resistance of the perineum as a cause of retarded labor. No one condition, especially in primiparæ, is so frequent a cause for the necessity of resorting to the forceps. This, like rigidity of the os, results from two quite different conditions. One where it depends upon an excessive contraction of the muscular fibres that enter into its composition. This obstacle the chloroform invariably overcomes. In the other case it is due to the presence of so great a quantity of adipose tissue as to render this portion of the pelvic wall too inextensible to permit the escape of the head. Here the chloroform will have no direct influence in accelerating the progress of the labor.

3d. The chloroform shortens the duration of labor, in all that class where the pains are diminished or suspended by vivid moral impressions or hysteria, or by pains resulting from the coincidence of some malady, either existing antecedent to or appearing during labor; such as rheumatism of the uterus or other muscular tissues, or sharp pains in the back or abdomen, gripings in the intestines, and the cramps which are occasionally produced by the pressure of the child's head on the sacral nerves. It is unnecessary for me to enlarge upon this point, as the reasons why the chloroform should in all such cases accelerate labor will be sufficiently obvious.

On the whole, then, I am obliged to state my conviction that chloroform accelerates labor in a greater number of cases than it retards it.

I have formerly been in the habit of teaching that chloroform should not be used in face and breech presentations, unless there were some special indications for resorting to it, on account of danger to the mother; as the safety of the child turns in a great measure, in these cases, on the shortness of the second stage of labor. I have now somewhat modified my opinion in this respect, and inculcate the principle that it should be used in these cases, unless there are special indications to the contrary; for the patient is much better prepared for operative proceedings, should they be required in order to hasten delivery to save the child. The indication to the contrary will be inferred from what has been said before, viz. where the assistance of the accessory muscles of parturition is arrested by the action of the anæsthetic.

The value of anæsthetic aid in operative midwifery, both manual and instrumental, is much more generally conceded than in cases of natural labor. Still it will be found that there is here a great diversity of opinion among obstetricians.

Forceps Cases.—Nearly all who have had a large experience in the use of chloroform in midwifery agree as to the propriety and value of this aid, where delivery by forceps is necessary. There are some, however, who do not deem it necessary either to facilitate the operation or to allay pain. Others again do not resort to the anæsthetic until the blades have been applied. In private practice, in consultation cases, and in the obstetric service of Bellevue Hospital, I have applied the forceps in one hundred and thirty-two cases when the patient has been under the influence of chloroform. In only one case since 1848 have I delivered by the forceps without this aid, and in this instance the patient was comatose from an attack of eclampsia. The operation is accomplished with much greater ease to the accoucheur and safety to the patient, if properly performed. If all due precautions are taken in introducing and locking the blades, the danger of injury to mother and child is greatly decreased, because the perfect quietude and tranquillity of the patient are secured, and the operation can be performed with the greatest deliberation and carefulness, which is often impossible when the patient is under great excitement. Especially is this true with regard to the safety of the perineum.

Version.—My experience is limited to twenty-three cases. The advantages of chloroform in such cases may be thus succinctly stated. There is much less resistance to the introduction of the hand, as it is introduced without pain to the patient, it rarely requires to be withdrawn and re-introduced on account of the paralysing effect of the uterine contraction, the external and internal manipulations are much more safely and expeditiously accomplished, and there is less danger of injury to the internal surface of the uterus.

Craniotomy.—I have performed this operation but five times in the last twelve years. Three of these were hospital cases, and two were cases that I saw in consultation with other medical gentlemen. The advantages of anæsthetic aid in such cases are too obvious to require enumeration. I certainly never would perform the operation without it, and regard it as horrible with it.

Cæsarian Operation.—I have performed this operation once; and from my experience in this case, and a careful study of all the reported cases accessible to me, I have arrived at the firm conviction, that by means of anæsthesia the mortality from this operation, when necessary, will be greatly diminished, and that it will be eventually more frequently performed instead of craniotomy, thus saving the life of the child, and affording a greater chance for the life of the mother. To give all my reasons for this opinion would involve a full discussion of the entire subject, which is not pertinent to the purpose of this paper.

Removal of the Adherent Placenta.—I have been called upon to perform this operation but twice since I have been accustomed to rely upon the aid of an anæsthetic. Its value in these cases is beyond all controversy, and I shall, therefore, not stop to dwell on this point.

It remains for me to speak of chloroform in the various diseases and accidents which complicate labor. In a former paper, which I had the honor to read before this body by appointment of the Obstetric Section, which has been published in the Transactions of the Academy, I have expressed my views as regards the therapeutic indications for, and the value of chloroform in the treatment of *puerperal convulsions.* As a more enlarged experience has only served to confirm these views, and has in no degree served to modify, I will not subject the Academy to the tedium of hearing them repeated. I may simply add that I believe these views are now generally accepted.

In the management of *Placenta Prœvia* I have never had occasion to use chloroform. In the cases which I have seen I did not regard it as judicious or justifiable. But I can readily conceive of cases where it would probably be of the greatest service. For example, if the patient was seen early, before any great shock was produced by a great loss of blood, and the os uteri was dilatable, the indication would be to turn and deliver at once, and here the chloroform would be invaluable.

Laceration of the Perineum.—It is stated by Dr. Tyler Smith that he "has met with bad cases of rupture of the perineum" under the use of chloroform. "The patients were relieved from pain, but volition was not suspended, and under these circumstances the violent and fearless straining efforts ploughed up the perineum by the fœtal head in the expulsive pains." All reasoning on the subject would lead to the anticipation that the danger of rupture of the perineum would be greatly diminished by the use of an anæsthetic; but other writers have made statements similar to that of Dr. Smith. None, however, so far as my knowledge extends, have detailed the phenomena of a series of cases, or even of one case, so as to enable us to judge whether the anæsthetic was a mere coincident, or bore the relation of cause and effect. My own experience would lead to a contrary result, for to the best of my knowledge, anything like a considerable laceration of the perineum has occurred but twice in all the cases in which I have administered chloroform, one of which would seem to confirm to a certain extent the views of Dr. Smith. The patient was well under the influence of chloroform, and fifteen minutes before the delivery of the head I had made a careful vaginal examination and found it still high up in the pelvic cavity. I was greatly astonished at the rapid delivery, and no little disgusted to find a fearful laceration of the perineum. Very good union, however, took place without operation. She has been confined twice since this labor, and in both instances the second stage has been unusually long. The other case occurred recently at Bellevue Hospital. The patient was a primipara, thirty-two years of age, and was delivered by me with the forceps. In this case, by careful measurement, it was found that the occipito-mental diameter of the fœtal head was six and five-eighths inches, one and one-eighth inch beyond the ordinary normal measurement. I may be pardoned for mentioning one extraordinary incident connected with this case: the patient came near dying from hemorrhage, not from the uterus but from the lacerated vessels of the perineum. Both mother and child have, however, since done well.

Post-partum Hemorrhage.—It is stated by several authors that the liability to this accident is manifestly increased by the use of an anæsthetic in labor; yet here, as in the preceding accident, there is an entire absence of anything like statistical evidence that this is the fact. In my own private practice, I have not met with a single instance of this occurrence, but I have seen quite a number of cases where this has occurred in the practice of others, and where no chloroform has been used. I do not ascribe the exemption which I have had entirely to the use of chloroform, although I do regard it as having exerted a manifest influence in this regard. The great security against post-partum hemorrhage lies in the efficient and permanent contraction of the uterus after delivery. What is termed uterine inertia is often but another name for uterine exhaustion, and this must certainly be much less likely to occur where the nerve force and vital powers have been saved by the use of an anæsthetic. It seems to be believed by some that the effect of anæsthetics is to depress the vital powers, and if this were true, post-partum hemorrhage would inevitably occur more frequently after their use. A committee of the Boston Society for Medical Improvement have just made a report "On the alleged dangers which accompany the inhalation of the vapor of sulphuric ether." The report is one of great value and interest, although none of its statistics and little of its reasonings will apply to the subject of this paper. In summing up their general conclusions, the first statement of the committee is, "The ultimate effects of all anæsthetics show that they are depressing agents. This is indicated both by their symptoms and by the results of experiments," etc. It seems to me that this statement needs to be greatly modified in order to express scientific truth.

Under certain circumstances and conditions, anæsthetics are in no sense depressing agents, but their effects are quite the contrary. I will illustrate the truth of this assertion by two striking examples. In 1853 I administered chloroform, in Brooklyn, to a patient of Prof. Carnochan, on whom he performed the operation of tying the external iliac, on account of an aneurism which extended from the origin of the femoral profunda upwards, below Poupart's ligament, as far as the middle of the external iliac artery. Previous to the administration of the chloroform, the patient was in an extremely prostrate condition, probably due to emotional causes. The lips were pallid, the surface was cold, and the pulse very rapid, thread-like, and feeble, and I was exceedingly apprehensive as to the effects of the anæsthetic. But after the inhalation the surface became warm, the pulse full and equable; and during the whole operation its frequency was not eighty-four beats in a minute. In 1858 a patient was brought into Bellevue Hospital who had suffered from a severe burn of the leg, the whole tissue of the lower part of the leg being destroyed and the knee-joint entirely denuded of all flesh. It happened to be just the hour of my clinic, and Prof. J. R. Wood, who had decided to amputate immediately, requested me to administer sulphuric ether. For reasons which I then assigned I declined to administer the ether, but I proposed the chloroform, to which Dr. Wood assented. The patient was at this time suffering fearfully from the shock. Hardly any pulse could be perceived at the wrist, the surface was cold and he was violently delirious. Dr. Wood amputated before a large number of students and medical men. As soon as the patient came under the influence of the chloroform, reaction came on, heat of surface returned, the pulse became natural as to its force and fulness, the patient was perfectly quiet, with a smile on his face, and remained so the whole time that he was under the influence of the anæsthetic.

Now, such facts as these, although perhaps not so striking, are familiar to every one who has had much experience in anæsthetics, and I think they conclusively show that the statement of the Boston committee should be essentially qualified.

Effects of Anæsthetics on Puerperal Convalescence.—It is very generally asserted that convalescence is much more rapid where an anæsthetic has been used during labor, but the physiological changes implied in the term puerperal convalescence, such as the involution of the uterus, and the restoration to their normal state of the other parts involved in the process of parturition, can in no possible degree be accelerated by the use of chloroform.

But, as a rule, the general condition of the patient for the first few days immediately succeeding labor, is beyond all doubt much better where the anæsthetic is used than where it is not. I have never had a patient suffer from headache, delirium, vomiting, and the various other unpleasant sequelæ which have been ascribed to this agent. This may be partly due to the article which I have used. With very few exceptions, I have only used Duncan and Flockhart's or Squibb's chloroform.

In conclusion, I submit the following propositions as a basis for the discussion of the Academy.

1st. Anæsthetic aid is of the greatest value in the obstetric art, and chloroform is generally the preferable agent for this purpose.

2d. It exerts no injurious effect, when properly administered, either upon the health of the mother or the child.

3d. It is perfectly justifiable to use chloroform in natural labor, solely for the purpose of relieving pain.

4th. It is especially useful in calming the extreme agitation and mental excitement which labor often produces in very nervous women.

5th. It should be administered in those cases of natural labor where the progress is suspended or much retarded by the pain occasioned by previous diseases or such as may supervene during labor, and in those cases where the irregular and partial contractions occasion intense and almost constant pain, but have no effect to advance the labor.

6th. It is of great service in spasmodic contraction and rigidity of the cervix uteri, in tetanic rigidity of the perineum, in certain forms of puerperal convulsions, and in the various obstetrical operations.

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A SUCCESSFUL CASE OF OVARIOTOMY.

By G. J. FISHER, A.M., M.D.,

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M. T., aged twenty-three years, was married at twenty, at which time she was a tall, slender, but healthy girl, weighing 117 lbs. Her parents are living and healthy. Menstruation commenced at the age of fourteen, and continued physiologically both as regards time and quantity up to the period of her marriage. On the bridal day while standing in the vestibule of the church, being thinly clad, she experienced a succession of chills, which were not, however, followed by any severe illness.

Menstruation ceased from the date of marriage in consequence of pregnancy, although at first it was not attributed to this cause, but regarded as the effect of cold. The whole period of gestation was characterized by unusually severe symptoms. A marked enlargement of the abdomen was early observed, which being in disproportion to the time of gestation, was a source of anxiety and annoyance to the patient, as this fact was likely to give rise to unfounded suspicions and remarks in regard to the true stage of development.

At the complete expiration of nine calendar months from the date of marriage I was called to attend her during confinement. Her abdomen was remarkably large and prominent, from which circumstance it was conjectured that she would give birth to twins. After eight hours of natural labor she was delivered, by feet presentation, of a healthy, well formed female child, of eight pounds weight.

After the birth of the child, the abdomen remained nearly as large as is usual at the full period of gestation; distinct fluctuation was detected, and for a little time I supposed a second fœtus would be expelled. The placenta was cast off by a single uterine contraction; the os was firmly closed, and the body of the uterus, as then discovered per vaginam, being small, the idea of twins was abandoned, and encysted dropsy diagnosed. The subsequent puerperal period passed without notable symptoms.

From this period, through many months, the patient took a variety of remedies, both rational and empirical, with a view to remove the dropsical accumulation, but without the slightest benefit.

The distension of the abdomen constantly increased, and finally became so great as materially to impair the functions of digestion, respiration, and circulation. The patient being anxious for relief, paracentesis was advised and performed August 30, 1860. The trocar was introduced midway between the umbilicus and left anterior superior iliac spine. The fluid drawn off was of an olive brown color, gelatinous and highly albuminous, eminently characteristic of cystic ovarian disease. After the removal of the fluid a flattened, irregular, nodulated mass was readily defined, occupying the lower region of the abdomen, rather the larger portion of which was inclined to the right; however, it was difficult to determine positively from which ovary it had developed.

The following is a statement of the dates of the several operations of paracentesis, and the quantities of fluid, in pounds, discharged: August 30, 1860, twenty-four; November 30, twenty-seven; February 22, 1861, nineteen; May 4, thirty; June 28, thirty-four; August 29, forty-six. Total, one hundred and eighty pounds. Two cysts were emptied at each of the two last tappings; one being evacuated, the trocar was again introduced and thrust onward, and made to enter another, thereby demonstrating the polycystic character of the growth.

Sept. 17, 1861, Prof. Charles A. Lee and Dr. Philander Stewart, of Peekskill, joined me in consultation in regard to the propriety of ovariotomy. The result was the unanimous advice of the operation, to which the patient and the relatives most cordially consented.

The patient was much emaciated, and gave unmistakable evidence of a rapid exhaustion of the vital powers; she had suffered from frequent attacks of recurrent circumscribed peritonitis, which had resulted in adhesions; also from pain; loss of sleep; the necessity of tapping at constantly diminished intervals, to render life tolerable; the increase in the number and capacity of the cysts, which from containing twenty-four pounds at the first, held forty-six at the last tapping; and a total loss of nearly two hundred pounds of fluid in one year, rich with the elements of the blood; these were all circumstances to urge the performance of the operation of ovariotomy as offering the only chance of protracting life.

Sept. 24, being the day appointed for the operation, Prof. C. A. Lee, Dr. P. Stewart, Dr. T. Snowden, and E. D. Fuller, all of Peekskill; Dr. N. Nivison, of Yonkers; Dr. J. Langer, of Davenport, Iowa; and Mr. T. J. Acker, my medical student, were present. The temperature of the room was brought up to 80° of Fahrenheit's scale, with directions to maintain it at that point. The windows and doors were to be kept closed to avoid air currents. The instruments were arranged on a stand, and covered, to conceal them from the observation of the patient. The operating table was placed near a window admitting a good light. The patient, who was not allowed to see any of the medical gentlemen who were invited to be present, and who was in a very tranquil state of mind, was arranged upon the table, her head and shoulders being somewhat elevated; her legs, which were carefully enveloped in warm woollen blankets, were permitted to hang over the end of the table, and rest on a stool. Care had been taken the day previous to evacuate the bowels, after which a full dose of tinct. of opium had been administered. No solid food had been allowed for twenty-four hours.

About three o'clock P.M. the patient, having previously taken a good "whiskey toddy," was brought under the full influence of a mixture of chloroform and sulphuric ether, in the proportion of one-third of the former to two-thirds of the latter. The pulse, 110 before the anæsthetic was given, when partially under its influence rose to 120, but sank to 104 when consciousness and sensation were suspended, and the operation was commenced. As soon as the patient became insensible the professional gentlemen were quietly admitted, having been previously advised to lay off their coats, on account of the high temperature of the room, and enjoined not to converse or in any way to excite the patient.

I hope the reader will excuse the minuteness of detail. In an operation involving so great a risk to the life of the patient, and one which the surgical profession in general are still reluctant if at all disposed to recommend, it is highly important that *all* the so-called minor details should be borne in mind and practised. It is by strict attention to the totality of the little circumstances of the operation, that success so much more frequently attends the recent than formerly reported cases. By increased care in these particulars we may yet expect a less degree of mortality from ovariotomy, and soon hope to remove the prejudice which many respectable surgeons, even at this time, entertain in regard to the propriety of the operation under almost any circumstances, notwithstanding the mortality is now less than follows almost any of the capital operations of surgery. I am happy to take this opportunity of expressing my obligations to my friend Dr. W. L. Atlee of Philadelphia, whom I met the day previous, for having kindly communicated to me all the particulars which an experience of sixty-four operations of ovariotomy had taught him, were quite essential to success.

Drs. Fuller and Nivison took charge of the anæsthetic. Dr. Stewart acted as my principal assistant, standing upon the left side of the patient, my position being upon the right. Drs. Lee, Langer, Snowden, and Acker, rendered valuable aid in supporting the abdomen, etc. The catheter was introduced; the bladder was found nearly empty.

Operation.—An incision was made through the abdominal walls, commencing two inches below the umbilicus and extending four inches towards the pubes. The peritoneum was carefully opened; the index finger introduced, acting as a probe, discovered extensive adhesions, which were broken up with considerable force. The peritoneal opening was then enlarged to the extent of the outer incision, viz. four inches; no serum escaped from the cavity of the peritoneum. The hand was then introduced and passed over the surface of the tumor, boldly detaching the extensive and firm adhesions which were encountered.

A large trocar was plunged into the presenting cyst, and several gallons of the peculiar mucilaginous fluid drawn off; the hand was again introduced to detach other extensive adhesions, some of which were so firm as to require the use of the knife. Another large cyst was brought forward and tapped, and in like manner a dozen or more cysts, varying in size, were brought forward and their contents discharged. Large masses composed of an aggregation of small cysts were drawn to the external opening, and when too great to pass readily, they were freely incised with a view to diminish the bulk and facilitate their removal.

The pedicle, which was developed from the right broad ligament of the uterus, was wide, but not very thick nor fleshy; it was long enough to admit of being brought external to the abdomen, for the adjustment of Dr. Atlee's improved metallic clamps, which were preferred to the ligature. The clamp having been applied as closely as possible to the tumor, with a view to increase the length of the pedicle, and screwed down so tightly as completely to prevent hemorrhage, the mass was cut off a little more than half an inch beyond the instrument. This is considered important, as it prevents the possibility of slipping, which would be more liable to occur should the tumor be cut off close to the clamp. The operation was so far unattended by hemorrhage that neither ligatures nor the solution of the persulphate of iron were applied. The adhesions were confined to the walls of the abdomen; the omentum, liver, intestines, and other viscera were free.

The parts having been carefully sponged, the left ovary being examined and found healthy, the peritoneal edges of the wound were nicely coaptated by hare-lip pins inserted an inch apart.

The pins were made to penetrate the abdominal parietes to the extreme edge of the cut peritoneum on one side, and entered at the same point on the opposite side, thus bringing the internal edges of the wound in perfect contact. Over the ends of the pins the figure-of-8 thread-ligature was arranged. This mode of dressing is regarded important, as it avoids leaving a pus-secreting surface within the abdomen. A strip of adhesive plaster was placed on each side of the incision, to support the pins' heads and points and the ends of the clamps. Long strips were also applied transversely to the wound, between the pins, across the abdomen. Over all, an oiled cloth and a large compress were laid; the abdomen was then enveloped with a broad double white flannel bandage neatly and snugly pinned. The anæsthetic, which had acted charmingly, causing very little nausea and vomiting, was discontinued, the patient placed carefully in bed, and allowed to recover her sensibility and consciousness, which she soon did. The operation occupied about one hour.

The tumor and its contents were not weighed. At the last tapping, forty-six pounds of fluid were drawn from two of the cysts; several gallons were contained in cysts that had never been punctured, making the total weight of fluid, at a low estimate, sixty pounds. Some of the more solid and fleshy portions, consisting of the walls of the large cysts and multitudes of small cysts, from the size of pins' heads to that of grapes and hens' eggs, contained a glairy, almost semi-solid substance—perhaps best termed colloid—while others were filled with an unctuous, lardaceous substance, resembling tubercular depositions. The non-liquid portion of the tumor weighed, at a low estimate, from fifteen to twenty pounds, which would give the total weight of the mass and its contents not less than seventy or eighty pounds.

The following notes of the progress of the case, subsequent to the operation, were kindly furnished by my friend, Dr. P. Stewart, to whose watchful care and skill both the patient and myself are largely indebted for the successful issue of the case. September 25th, 6.30 A.M.—Pulse 112. Patient slept but little last night, notwithstanding she had taken seventy-five drops of McMunn's elixir of opium, which preparation usually acts well in her case. Vomited three or four times in the course of the night; complains of pain in the back and hips. 10 o'clock A.M., pulse 124. 7 P.M., pulse 136. Other symptoms remain much the same as in the morning; occasionally vomiting through the day. Diet has consisted of cracker-water. Sixty drops of elixir of opium were given in divided doses, at 8 and 11 o'clock P.M. Sept. 26th, 6.30 A.M.—Pulse 112. Rested better than the night previous; enjoyed some sleep; no vomiting; skin moist; tongue slightly coated; no pain or tenderness of the abdomen; complains of great thirst. 1.30 P.M.—Pulse, 110. 7.30 P.M.—Pulse, 104. Ordered cracker-water with milk, and weak beef-tea, in moderate quantities. Directed forty-five drops of elixir of opium to be taken at bed-time. Sept. 27th, 7 A.M.—Pulse, 120. Slept but little last night; bilious vomiting occurred two or three times during the night. Patient complains of great oppression at the epigastrium; restlessness, and frequent sighing. The skin is perspirable; tongue a little redder than natural, and insatiable thirst. 2 P.M.—Pulse, 128. 8 P.M.—Pulse, 116. Directed the free use of beef-tea; cracker-water *ad libitum*; thirty-five drops of elixir of opium *pro re natâ*. Sept. 28th, 8 A.M.—Pulse, 112. Patient reports herself as feeling much better; slept pretty well last night. The sense of oppression at the epigastrium continues, however. She has taken one hundred and twenty drops of the opium during the past twenty-four hours. The countenance is better than at any time since the operation. Dr. Fisher visited her at one o'clock P.M. The wound was examined; the pedicle had sloughed; the clamp was found lying loosely upon the abdomen, and was therefore removed; there had been no hemorrhage; the wound had nearly united by first intention; the pins were removed. Abdomen slightly tympanitic. 7.30 P.M.—Pulse, 120. Former treatment continued. Sept. 29th, 8 A.M.—Pulse, 128. Rested well last night; feels refreshed and comfortable this morning; everything looks favorable; continue diet and opium. Sept. 30th, 7.30 A.M.—Pulse, 130. Rested and slept well last night; all the symptoms are satisfactory. 7.30 P.M.—Pulse, 120. Continue treatment. Oct. 1st, 8 A.M.—Pulse, 112. Passed another good night; countenance cheerful. An enema of soap and water moved the bowels gently, but efficiently. [The Dr. has neglected to mention the use of the catheter two or three times a day during the first week.] 4 P.M.—Pulse continues at 112. Oct. 2d.—The patient is very comfortable; the tongue remains a little red and tender. She has a desire for food, for the first time; bread and butter and beef-tea are allowed.

Dr. Stewart adds:—"From this time the patient has gradually improved, until the present (Oct. 15th), three weeks from the date of the operation. The pulse is now at 94, and the wound has healed."

Since the above clinical notes were made, I have visited the patient on two occasions; the last as recently as the 9th day of November, nearly seven weeks after the operation, at which time she had been up about her room; she was free from pain and tenderness of the abdomen; the wound had entirely healed; the appetite was good, the digestion easy, the bowels regular, the sleep natural, the mind cheerful, and in every respect the patient was doing well, and hoped soon to be able to resume the cares of her household.

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A CASE OF CANCEROUS CACHEXIA.

By J. F. READ, M.D.,

OF FAIRFIELD, GREEN CO., O.

MRS. LONGSTRETH, aged 31 years, the mother of eight children, had, as far back as my memory serves me (a period of some fifteen years, perhaps), a slight discoloration of the skin about half an inch from the external canthus of the right eye. It was of a brownish cast, slightly raised above the surrounding surface, of a diameter of four lines. It underwent no change whatever, in point of color, size, or appearance, until last August two years ago, when it commenced to enlarge, she being at the time slightly advanced in her eighth pregnancy. The increase in size was comparatively rapid, and in February, 1860, the growth was as large as a turkey's egg, having a pediculated base three-fourths of an inch in diameter. It was of a dark brown color, exceedingly irregular upon the surface, studded over with convolutions, separated by fissures of considerable depth. From these fissures there issued a very troublesome and exceedingly offensive hemorrhagic discharge. This discharge was at times very copious, and it was on this account more particularly that she sought aid. The surrounding surface appeared to be healthy, save the veins of the upper eyelid, which were very much enlarged and somewhat tortuous in their course. From its mechanical weight it had given rise to considerable deformity about the eye. I concluded to remove the mass by a crucial ligature, being fearful of troublesome hemorrhage from the use of the knife. There was no enlargement or soreness of the lymphatic glands in the cervical region, or in the axilla, nor any cough to excite suspicion. I administered chloroform and performed the operation about the middle of Feb. On the sixth day after ligation the tumor dropped off, leaving a smooth, healthy looking, granulating surface, which cicatrized over nicely in about a fortnight, leaving no trace or appearance of disease. It remained healthy for several months, when a livid growth sprang up upon the tarsal cartilage of the inferior lid, the size of a small filbert, which I touched with nitric acid, causing its disappearance. I then lost sight of my patient for some months, at the end of which time I called, and to my astonishment found, at the angle of the inferior maxillary bone, an open malignant ulcer of two and a half inches in diameter. There was no pain or soreness complained of, but an offensive discharge of a sanguinolent character, and at short intervals so very copious and free that it would almost exsanguinate her. This condition of things contined during the winter and spring, never allowing her, however, to fully recover from the previous attack, before she knew a subsequent one. She grew weaker and weaker, until finally she was unable to walk, her appetite remaining good and her digestion unimpaired all the while. The cervical and axillary glands gave no indication of disease during this whole period. But, without any show of trouble in those regions, about the last of spring she began coughing, which continued during the remaining three months of her existence. Her cough was unattended by expectoration, and its character appeared to be bronchial. She appeared so weak at this time that I was unable to make a physical examination. She was once attacked with hæmatemesis, under which she was with great difficulty revived.

Several months before dissolution, along the course of the principal superficial veins throughout their entire extent, there were developed spots or marks about the shape and size of the one that marked the development of the disease. They were not permanent, however, but would disappear from their first site and reappear in a new locality. These small nodules made their appearance in different veins of the body during the life of the unfortunate sufferer.

I considered this case as one which illustrates in quite a marked manner the development of a cancerous cachexia. The disease first showed itself at the corner of the eye and afterwards over the angle of the jaw, thence travelling to the superficial veins, stomach, and lungs. The symptoms of its progress were to my mind very conclusive, although I have to regret that no post mortem was allowed to make "assurance doubly sure." There is also another interesting point to note in connexion with the case, and that has reference to the utter futility of an operation. At the time of the operation, I was satisfied that all the disease was removed; but soon after, to my surprise, I found that it had developed itself in a more formidable manner, not only at the angle of the jaw, but in the internal organs.

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REVACCINATION OF THE PRUSSIAN ARMY IN 1860.—During the year 1860, 69,096 individuals were either vaccinated or revaccinated. Of this number 57,325 exhibited distinct cicatrices from former vaccinations, and 7420 distinct cicatrices, while 4151 showed no marks at all. The vaccination went through its regular course in 44,193 cases, was irregular in 8256, and was without result in 16,647. These last vaccinations again gave 5577 examples of success, and 11,650 failures. During the year there occurred among the above soldiers, who were successfully revaccinated, and others who had been so in former years, six cases of varicella, and one of varioloid, but no case of variola was met with. Thus, during the year 1860, out of 69,096 vaccinations, 49,770 proved successful, *i.e.* 72 per cent. In the entire army there occurred 44 cases of pock during the year 1860, viz. 17 varicella, 23 varioloid, and 4 variola. Of these, 3 of the cases of varicella, 14 of varioloid, and 3 of variola, occurred in persons who had not been revaccinated; 8 of varicella, 8 of varioloid, and 1 of variola, occurred in those who had been revaccinated without effect; and the remaining 7, as stated above, occurred in those who had been revaccinated with success.—*Med. Times and Gazette, from Preuss. Med. Zeitung*, 1861.

Reports of Societies.

OBSTETRICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.
Stated Meetings, *June and October*, 1861.
ALFRED UNDERHILL, M.D., Chairman.
[Reported by M. G. PORTER, M.D., Secretary.]

DISCUSSION ON SCARLATINA (*continued*).

Dr. Jacobi believes that vomiting, which had been classed one of the first and most important symptoms of this disease, occurs in consequence of the intensity of the fever, and that it is not diagnostic, inasmuch as it exists rarely in most of the diseases of children. In all cases, when the fever is high we find vomiting as a symptom; considered scarlatina eminently a disease of a paralytic character; explained this view by reference to cases of anæmia, and thought the treatment by tonics and stimulants borne out by pathological facts. The causes given by authors of the dropsy ensuing after scarlatina are; 1st, the general poisoning by the peculiar scarlatinous poison, whatever it is; 2d, the impermeability of the skin during the process of eruption and desquamation; 3rd, the influence of sudden cold, especially during the period of desquamation; and 4th, (which he deemed the most important) the scarlatinous process taking place in the kidneys, as well as elsewhere. There are few cases in which these organs are not affected; believes now, that the cases of sudden death on the first day are due to sudden and acute uræmia instead of the effect of the scarlatinous poison as he had formerly supposed. In his experience, the remedies which have the most direct effect upon the kidneys are the best; the most reliable being tannic acid, ferri sulphatis, and tinct. ferri muriatis. These are excreted in the same manner, and produce like effects, though the first is only applicable in such as he would call chronic cases; has had bad results from salines, digitalis, etc.; they irritate and stimulate the kidneys too much; spoke of a case under his care five or six years ago, in which digitalis was given and reduced the anasarca very rapidly, but afterwards the patient sank and died notwithstanding all his efforts. By combining calocynth with the tannin, its astringent effect is avoided. To a child three or four years old, give from eight to ten grains of tannin in divided doses per diem. The remedy is well tolerated, and he often gives it for five or six weeks. The secretion of urine is increased very soon.

Dr. Gardner said that when he went home from the last meeting of the Section, his thoughts were engrossed with the symptoms of vomiting as diagnostic in this disease. He had since seen several cases in which vomiting was the first symptom, and which resulted in measles; mentioned a case of scarlatinous anasarca in which the use of chlorate of potash dissolved in syrup of squills was followed by good results. His general plan of treatment for this disease and its sequelæ, was tonics, bark, iron, &c.; had seen two cases of pyæmic abscesses after scarlatina, and believed sequelæ generally occurred after the milder cases of scarlatina.

Dr. Sewall lauded daily warm baths, and the use of acetate of potash during desquamation to prevent anasarca. Mentioned a case of extreme deafness in a child of eleven years, which had existed nine years, and another of metastatic abscess following scarlatina.

Dr. Blakeman said that vomiting, as an early symptom, had not attracted his attention, but he had lately attended several cases in which it did not occur at all; had often seen rheumatism follow scarlatina.

Dr. Garrish related a case of scarlatina, which, on the fourth day, was complicated by a variola eruption, and followed by coma, but the patient recovered; related a case resulting in anasarca, and had often seen furunculi and pyæmic abscess follow scarlatina; believed scarlatina contagious, and thought he conveyed it to his own child. In regard to otorrhœa, after this disease, his treatment would be palliative, viz. injections of warm water, mucilage of slippery elm, flaxseed, etc., and after a few days, a weak solution of alum, also counter-irritation with blisters or tinct. iodine over the mastoid process.

Dr. Budd said the reports of Deaf and Dumb Asylums assert that the majority of cases of deafness not congenital result from scarlatina. He disagreed with Dr. Jacobi, and thought the function of absorption in the skin was not arrested in this disease, and illustrated his position by reference to the practice of inunctions for the relief of scarlatina, and to the external use of opium, which he had known produce its constitutional effects.

Dr. Batchelder stated in regard to the sequel otorrhœa, that the course of the inflammation was through the eustachian tube and internal ear, rupturing the membrana tympani, and extending even to the mastoid cells. Many cases thus ended fatally. Dr. B. thought the symptom of vomiting in the diseases of children arose from an irritation of the medulla oblongata.

Dr. Hubbard believed cleanliness and fresh air the only treatment of much service for otorrhœa; the fetor of the discharge might be dissipated by a solution of the nitrate of lead as a disinfectant. Of dropsy following scarlatina, thinks in most cases there exists congestion of the kidneys, and considers counter-irritants, fomentations, digitalis, colchicum, and occasional cathartics of jalap and cream of tartar, the best remedies.

Dr. Blumenthal remarked that in addition to the usual sequelæ, he had met with a case of amaurosis with total blindness; another of idiocy, and another of almost complete loss of speech, which were ascribed to scarlatina. He also mentioned rheumatism, chorea, glandular swellings, and abscesses, as of common occurrence.

Dr. Prince believed the sequelæ enumerated were, perhaps, generally the consequence of the milder cases of scarlatina, which might, he thought, arise from the deficient care such cases were likely to receive. He thought scarlatina awakened many latent diseases to which children are predisposed; knew of a case of idiocy which appeared to support this opinion.

Dr. Ludlow thought that the most dangerous sequelæ were effusions into the large cavities; had known recovery after convulsions occurring in the course of the sequelæ.

Dr. Van Kleek considered scarlatina one of the most alarming and serious of diseases; had known a number of cases of deafness from otorrhœa succeeding this disease—and one in which both external and internal ear were entirely destroyed—related a case in which there occurred after scarlatina, blindness from ulceration of the cornea, convulsions, dysentery, and death. He corroborated remarks of previous speakers respecting the more frequent occurrence of sequelæ after mild cases, and stated several cases of sudden death, and one followed by jaundice and chorea.

Dr. Joel Foster had seen many cases of albuminuria after mild attacks of scarlatina, and several in which the parotid gland was unaffected, while the surrounding lymphatics were much swollen.

Dr. J. L. Smith said his experience accorded with that of the other gentlemen, and he thought there was no disease in which we should be more cautious in our prognosis; thought the anasarca after scarlatina might arise from an anæmic condition of the system.

Dr. Pond was of the opinion that in the swellings of the neck the inflammation was located in the cellular tissue.

Dr. Church had within the past year seen several cases of rheumatism following scarlatina in which there had been no anasarca—and it had been a question with him whether the treatment he had used for the former, viz. iodide of potash and colchicum, had prevented the latter. He added that in his practice during the months of May and June last, nearly every case of scarlet fever was followed by rheumatism, while anasarca occurred in none.

(*To be continued.*)

American Medical Times.

SATURDAY, NOVEMBER 30, 1861.

IMPROVED MILITARY SCIENCE AND THE DUTIES OF THE ARMY SURGEON.

Ambrose Paré, the famous Chirurgeon to three consecutive Kings of France, writing, now nearly three hundred years ago, "of wounds made by gun shot, other fiery engines, and all sorts of weapons," contrasted the firearms of his time with the warlike weapons of the ancients, and says of the latter, "they seem to me certain childish sports and games made only in imitation of the former." So impressed was he with the destructive power of the "fiery engines" of war in use that he pronounced the following opinion upon the inventor of the gun:—"I think the Deviser of this deadly Engine hath this for his recompence, that his name should be hidden by the darkness of perpetual ignorance, as not meriting for this, his most pernitious Invention, any mention from Posterity." The only comparison which he could make of the effects of "this hellish Engine" (a cannon) "is with thunder and lightning;" greatly, however, at the expense of the latter. He says: "For what in the world is thought more horrid or fearful than Thunder and Lightning? and yet the hurtfulness of Thunder is almost nothing to the cruelty of these infernal Engines." Had the pious Huguenot surgeon foreseen how these "infernal engines" and "Magazines of Cruelty," as he calls them, would multiply in after ages, and be rendered infinitely more destructive of human life, we may well believe that he would have added fearful maledictions to his condemnation of this inventor. But if a collection of the "fiery engines, and all sorts of weapons" of the sixteenth century were to be exhibited in our day, it would be the object of universal merriment. The formidable weapons which then struck with consternation would be regarded as little better than children's playthings compared with the instruments of warfare which are now brought into the field.

The improvements in the various enginery of war are indeed marvellous in our time; even if we compare it with that of a half or a quarter of a century since, It is seen, not only in the comparatively greater precision of firearms, and at greater distances, but in the destructive character of the missiles projected. A favorite order in the war of the revolution, when the old flint-lock musket was the weapon in the hands of the common soldier, was, "hold fire until you see the white of the enemy's eye." Even ten years ago the musket balls would not strike the object at eighty yards, and hence the few wounds which often followed a discharge of musketry, at the distance at which opposing forces generally meet. In Caffraria 80,000 rounds of ball-cartridges fired from the old musket wounded but twenty-five Caffres; and at the battle of Salamanca but one ball in 3000 took effect. Contrast these results with the rifle, which is now principally in the hands of our soldiers. The Enfield rifle is sighted at 1000 yards, and two-thirds of the shots of a company of infantry have been known to take effect upon an attacking body of cavalry. The contrast of the precision of recent firearms with those in use in the early part of this century is strikingly exhibited in the following:—At the actions in Flanders on the 16th, 17th, and 18th of June, 1815, including the battles of Quatre Bras and Waterloo, the number of wounded in the British army was about 8000. The armies approached within 1200 yards of each other, and were for the most part out of reach of all but field guns. Now, balls will take effect at 2000 yards, and the result is seen in the battle of Solferino, where in a single contest 11,500 French, 5300 Sardinians, and 21,000 Austrians were wounded. Another noticeable effect of improved firearms, "*armes de précision*," is the lodgment of several balls in a single person. This was seen after the battle of Solferino, where soldiers were found to have several wounds of different origin in the same person. One was noticed who had received four balls at the same time. The late Col. Baker, who fell at Leesburg, Va., is said to have had no less than five bullet wounds. It should also be stated that the additional force given to projectiles increases largely the number of wounds from a single ball. One Enfield rifle ball has thus been known to wound several persons. The improvements in the destructive capacity of heavy ordnance are in kind and degree like those in small-arms.

The improvement in projectiles is not the least important item in the comparison of the present and the past state of military science. The round musket-ball was very liable to be diverted in its course by blood vessels, tendons, &c.; it was not uncommon to find it traversing large tracts of the body without seriously wounding important organs, or parts. The cylindro-conoidal ball, now so much used, is not diverted even by bone, but penetrates directly every tissue or organ in its track, leaving the most dangerous and destructive wounds.

The bearing of these facts upon the duties of the modern military surgeon are obvious. Not only are his duties greatly increased, but they are rendered far more difficult than formerly. A single battle is liable to overwhelm the present surgical staff with labor, to the great distress and loss of the wounded. Well appointed as is the medical staff of the French army, at the battle of Solferino hundreds of the wounded had to wait for days before they had surgical attendance. At Brescia, 15,000 of the wounded were congregated soon after the battle, most of whom were in urgent need of medical and surgical aid. In the few battles of the sanguinary war which is now upon us, we have witnessed the same lamentable deficiency in the medical force, which has been more and more apparent in recent wars. At Bull Run we hear of dwellings and churches crowded with wounded imploring relief, to whom no other relief came but death. Hundreds are reported to have died of wounds which admitted of prompt succor. We hear of surgeons, who, on that day, stood appalled at the magnitude of their duties, and their utter inadequacy to the task. At Bethel, Leesburg, Belmont, in Western Virginia, and in Kentucky, the fact has become painfully evident that our losses in battle from the want of proper surgical aid to the wounded, are to be enormous.

The French, with characteristic energy, improved their experience, and have in some measure supplied their deficiencies. In addition to the three regimental surgeons, they have organized corps of ambulance attendants, trained to the proper handling of the wounded, and who are made, by special instruction, sufficiently familiar with injuries to be able to succor the severely wounded on the field, as where hemorrhages are imminent. These semi-medical auxiliaries to the staff of surgeons are of very great service on the field. They follow the advancing column closely; examine the fallen; if their wounds are necessarily immediately fatal, they merely place the soldier where he may die undisturbed and uninjured. If the wounds do not demand immediate surgical attendance, they are temporarily dressed and the soldier is dispatched to the permanent hospital; but if they require immediate operation, such simple dressings as will prevent accident are applied, and the wounded man is sent to the field hospital, where the surgeon is in waiting with assistance. Thus the surgical staff is prepared to meet every emergency, however great it may be.

The medical staff of our army has recently been improved by the appointment of a corps of Brigade Surgeons, and of medical cadets; but even with these additions it may well be questioned if the regimental staffs should not be increased. At the present time they are of the same force as in the war of the Revolution, when, as appears from the above facts, the number of wounded in every considerable battle was less by seventy-five per cent. than in the engagements which we are now to witness. How impotent are the efforts of two surgeons when three or four hundred troops are suddenly smitten with the gravest gunshot wounds! Well may they stand amazed in the midst of their labors at the sight of suffering and death, which they have not the physical power to mitigate or prevent.

Two remedies for this deficiency suggest themselves. Either there should be an increase of the regimental medical staff, equal to any and all emergencies, in addition to a well trained ambulance corps; or there should be a large reserved force of surgeons in civil practice, who can be relied on at any moment when summoned to the assistance of the army corps. During the present war, we believe the latter expedient could be adopted with great success. Most of the battle-fields will be so accessible by steam conveyance, that surgeons could readily be assembled in any desirable numbers before an impending engagement; and we have assurances, that hundreds of our most eminent surgical practitioners are prepared to offer their services to Government gratuitously, under such circumstances. We cannot doubt that considerations like these have already forced themselves upon our authorities, and that our country will hereafter be spared the sickening details of destructive battles, rendered still more sanguinary and fatal from the neglect of the wounded, due to the want of sufficient medical aid.

THE WEEK.

The Board of Health of Philadelphia object to the place selected by the government for a military hospital in that city, on the ground that it is totally unfit for that purpose both in site and plan. The location is represented as being in close proximity to the filthy docks of the river, defective in ventilation as well as in other sanitary provisions. The government must be most unfortunate in the selection of agents to locate its hospitals if they manifest such a total want of regard to the sanitary condition of their vicinity.

The U. S. Sanitary Commission commences another session at Washington to-day. We have, from the first, regarded this commission as one of the most important auxiliaries to government in the prosecution of the war. Although its labors are unobtrusive, yet the good results which flow from its well concerted plans are obvious on every hand. It deserves the encouraging support of every patriot and philanthropist. We have several times called the attention of the medical profession to its claims upon their support, and pointed out the methods by which they could give it material aid. Our appeal has not been unheeded, but we hope no one will weary in his contributions of the means by which the Commission can extend its usefulness.

We find the following statement in a London contemporary:—"At King's College it is now a rare thing to see an amputation; and Mr. Fergusson asserts that in almost nine cases out of ten, excision should be performed in its stead. He says the risk to the patient's life is not greater; and if so, how great is the advantage of a real though stiff limb, to that of a false one."

The following advice to apothecaries by Dr. Bulleyn, an "interesting and sagacious" London practitioner of the last century, commends itself, in some particulars, to the attention of the drug dispensers of our time:—

"The Apoticarye.—1. Must fyrst serve God, foresee the end, be clenly, pity the poore. 2. Must not be suborned for money to hurt mankynde. 3. His place of dwelling and shop to be clenly to please the sences withal. 4. His garden must be at hand, with plenty of herbes, seedes, and rootes. 5. To sow, set, plant, gather, preserve, and kepe them in due tyme. 6. To read Dioscorides, to know the natures of plants and herbes. 7. To invent medicines to choose by coloure, tast, odour, figure, &c. 8. To have his morters, stilles, pottes, filters, glasses, boxes, cleane and sweete. 9. To have charcoles at hand, to make decoctions, syrups, &c. 10. To kepe his cleane ware closse, and cast away the baggage. 11. To have two places in his shop—one most cleane for the phisik, and a baser place for the chirurgie stuff. 12. That he neither increase nor diminish the physician's bill (*i. e.* prescription), and kepe it for his own discharge. 13. That he neither buy nor sel rotten drugges. 14. That he peruse often his wares, that they corrupt not. 15. That he put not in *quid pro quo* (*i. e. use one ingredient in the place of another when dispensing a physician's prescription*) without advysement. 16. That he may open wel a vein for to helpe pleuresy. 17. That he meddle only in his vocation. 18. That he delyte to reede Nicolaus Myrepus, Valerius Cordus, Johannes Plucaton, the Lubik, &c. 19. That he do remember his office is only to be ye phisician's cooke. 20. That he use true measure and waight. 21. To remember his end, and the judgment of God: and thus I do commend him to God, if he be not covetous or crafty, seeking his own lucre before other men's help, succour, and comforte."

The danger of drinking water from wells in cities, especially where intra-mural burying grounds exist, has frequently been proven. During the prevalence of cholera it was discovered that that fatal epidemic was propagated partly by the waters of springs and wells supplied by surface drainage. That many a country churchyard thus contaminates the surrounding wells, and gives origin to apparently causeless epidemics, there can be no doubt. The water that filters through these depositories is generally clear and sparkling from the excess of saline ingredients. Mr. Letheby, Health Officer of London, has lately examined thirty-four city pumps, and in every case the water was fouled with surface drainage. In speaking of the influence of the percolations from graveyards, he says:—

"Nor are the percolations from the graveyards of a city less injurious; experience has demonstrated that this also is a prolific source of disease. Sir James M'Grigor relates that when the British army was in Spain, about 20,000 soldiers were buried in a rather small space of ground; this was done in the course of two or three months, and soon the troops who drank the water from the wells of the neighborhood were attacked with dysentery and malignant fevers. The cause of the mischief was clearly traced to the hardly-recognisable impurity in the water from the shallow wells. Here, however, in the churchyards of this city there are the remains of ten times such a buried army undergoing decay; and in the whole of this metropolis, in a space of not more than 218 acres of soil, there were buried not long since as many as 50,000 dead in the year. In a generation of thirty years this would give us 1,500,000 of decomposing bodies in the surface soil of London; and through these the water percolates to find its way into the porous stratum which supplies the shallow wells. At best, the change of this corruption is but imperfect, and the presence of ammonia and saltpetre tells of the process of decay, and indicates the dangers which accompany it."

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At the last meeting of the Section on Surgery, Professors Marsh and Porter, of Albany, were present, and the former exhibited several very interesting specimens of fracture of the neck of the femur, supposed to be within the capsule, united by bone. He also exhibited specimens illustrating the importance of exsection of the head of the thigh bone, and remarked that many years since he made a free incision in a case of morbus coxarius, with the design of penetrating the cavity of the joint, but failed to do so. The operation was considered very cruel by the attendants, but subsequently the head of the femur escaped through the incision. Dr. Vedder, of Flushing, exhibited a splint for making extension and counter-extension in hip diseases, which combined lightness and cheapness in the highest degree, the shaft being made of wood.

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The announcement that a paper "On Anæsthetics in Midwifery" would be read by Dr. Barker, brought together an unusually large number of the members at the last meeting of the Academy. Our readers will find in this number of the Medical Times, the paper in full. The reading of the paper was followed by an interesting discussion (which we shall give in some future number) in which Drs. Delafield, Peaslee, Gilman, Elliot, Stevens, Detmold, Van Buren, and Wooster participated. The paper elicited warm commendations from nearly all of the speakers, but when a paper is well written, and well read, careful criticism is not to be anticipated, as the minds of those who hear it are carried along too rapidly with the reader to admit of careful weighing or close examination. The next meeting of the Academy, on Wednesday, Dec. 4, is assigned for the further discussion of the paper, when undoubtedly views in opposition to it will be heard. The discussion will be opened, by vote of the Academy, by Dr. Geo. T. Elliot.

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Hospital at Hartford, Ct.—The hospital at Hartford, Ct., though but partially completed, has gone into operation under Dr. Hawley. The present number of beds is fifty.

Virchow is about to enter the Prussian Chamber of Deputies, and it is expected that he will obtain marked success, as his oratorical powers are very great.

The British Pharmacopœia.—This work is so far advanced as to be promised next spring. Dr. Christison, of Edinburgh, is Chairman of the Committee.

Obituary.*

ELI IVES, M.D., LL.D.

Eli Ives was born in New Haven, February 7, 1779. His father was a physician of eminent worth and large practice in this city. He entered Yale College in 1795, having acquired his preparation partly by himself, inspired by his fondness for learning and his determination to obtain it, and partly under the tuition of the Rev. Ammi Ruhamah Robbins of Norfolk, Ct. He graduated in due course, in 1799, at the age of twenty years, in the same class with the late Prof. James L. Kingsley, of Yale College, and Prof. Moses Stuart, of Andover Theological Seminary. His class numbered at graduation twenty-six; and he survived them all except one, the Rev. E. J. Chapman, of Madison Co., N. Y. The two years after his graduation he was Rector of the Hopkins Grammar School in New Haven, and has been for some time its oldest surviving teacher. What his grade of scholarship was in College, I have been unable exactly to ascertain; but I infer that it was high from the fact that soon after the termination of his services as Rector of the Grammar School the office of tutor in Yale College was offered him; which he declined, doubtless because he wished to devote his time wholly to preparation for his chosen profession. That preparation he obtained in study partly in his father's office, partly in attendance on the medical lectures of Drs. Rush and Wooster, in Philadelphia, and partly, indeed chiefly, with Dr. Æneas Monson, of this city, who was a very learned man, for that day, especially in botany and chemistry in their relation to materia medica. This study of medicine he pursued while he was Rector of the Grammar School, thus performing double service. And he began to practise here in his native city, at the termination of his Rectorship, in 1801, two years after his graduation at College. His attendance upon the lectures in Philadelphia was at a later period.

It was doubtless an advantage to him for obtaining practice at the outset that his father was a physician here widely employed, and that he was known as "young Dr. Ives;" which sounds strangely to us, who, the larger part of us, have known him only as "old Dr. Ives," and have known his sons and grandson as physicians in active service. Yet there are some among us who remember him as "the young Dr. Ives." This advantage, however, at the beginning, would have availed but a short time, had he not possessed real merit to sustain and commend him. That merit was such as to gain for him rapidly a very large practice and great success in it, and so to win for him general confidence and a brilliant reputation. Quite early in his medical life, much earlier than is usual even for those of eminent skill, he began to be employed as a consulting physician; and in this capacity he was frequently engaged not only in the city, but far and wide through the State. His practice of this character was unequalled by that of any physician in the State, certainly in this part of it. In this active service, at home and abroad, Dr. Ives continued for more than forty years, although from the first, even from his College life, he had to struggle with feeble health and frequent bodily infirmity. About twenty years since he resolutely began to withdraw from general practice, and from that time has attended only in a few cases where his counsel was urgently solicited, or when his advice was sought in peculiar instances at his own dwelling, or in families of his old friends who felt as though they could not have any one else. Having thus spoken of the beginning, success, and extent of Dr. Ives's practice, it may contribute to the simplicity and clearness of this sketch, if, at this point, I speak of his characteristics as a physician.

And here I will state that thinking it presumptuous to attempt to delineate those characteristics unaided, especially as my personal knowledge of Dr. Ives has been chiefly since he withdrew from general practice, I have sought the aid, very willingly given, of the judgment and suggestions of that accomplished and honored physician of our city, Dr. Jonathan Knight, who is nearest to Dr. Ives in age, and was for nearly forty years associated with him as Professor in the Medical Department of Yale College.

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* Compiled from a sketch of his Life and Character, by the Rev. Dr. Dutton, M.D., of New Haven, Ct.

The most prominent and perhaps the most valuable characteristic of Dr. Ives as a physician, was his insight, his perspicacity, his power of readily looking through and through a case, so as to perceive the real nature of the difficulty to be removed, the evil to be remedied. His perceptive powers, in other words, were very remarkable, giving him great ability to observe and note all the facts of disease, and all facts with reference to the process and the means and materials of cure. A necessary accompaniment to the power just mentioned—necessary to make a physician of learning and resources—is a comprehensive and retentive memory. This Dr. Ives possessed. His memory retained accurately and securely the facts regarding diseases and remedies, which his power of insight and observation had acquired. And they were so arranged and classified as to be at his command. Another, a third, characteristic of Dr. Ives, which rendered him a physician of eminent learning and large resources, was his extensive and thorough knowledge of materia medica. Those who have been acquainted with his practice will remember how often he used to prescribe the use of some botanical plant, and not rarely one growing in this region, telling just where to go and find it, and not infrequently the place would be his own garden or back yard. In the botanical department of materia medica he was far beyond his age, and was the most learned physician of his time in this country. In this part of medical learning, Dr. Æneas Monson, as has already been intimated, gave him inspiration and instruction. That he made such attainments in this department of knowledge, is truly wonderful; for at that period there were no books published on that subject in this country, and it was almost impossible to obtain them. Dr. Monson acquired his knowledge in this department by his own observations, experiments, and experience, and by the communicated observations and experience of those around him, and of those with whom he corresponded for that purpose, in this country and in Europe. And Dr. Ives, his pupil, gained his knowledge from the same sources, and also from a few books which he obtained with great difficulty from Europe. Dr. Ives was a very diligent and thorough student of medical and scientific books, especially in his early and middle life. He sought for knowledge independently in the book of nature; and he sought it also in the books in which other men have recorded what they have learned from nature's book.

Dr. Ives was remarkable in his conduct as a physician for some qualities, which, though they belong to the moral department of his character, yet, as they influenced his medical practice, should be mentioned in this connexion. He was characterized by great integrity as a physician. He was fair, upright, and honorable, in his intercourse with patients, and in his intercourse with other physicians, especially when called in council, consulting without regard to his own interest in the case. "He acted in his medical practice," said Dr. Knight, "with remarkable independence of pecuniary considerations, and was in all respects a very fair and honest-minded man."

He was characterized also by a genial and generous interest in other physicians, especially the younger members of the profession, treating them with great kindness and courtesy, and endeavoring to promote harmony of feeling and action. "In this latter particular," said Dr. Knight, "he brought about quite a reform in New Haven when he entered upon the profession." There was at that time, and had been, a great deal of jealousy and rivalry and unpleasant feeling among the physicians of the place. For the purpose of remedying this, as well as for promoting the objects of medical science and skill, he proposed and had a leading influence in forming, in the year 1803, the New Haven Medical Association, which from the time of its origin has held meetings every fortnight, that have had an excellent influence in promoting mutual acquaintance, confidence, fellowship, and harmony. Of its original members he was the last survivor. He was an active friend of the State Medical Society, and of the National Medical Society, which, at its recent meeting in this city, honored him by choosing him, notwithstanding his age and infirmities, their presiding officer.

But the most important service which Dr. Ives rendered to medical science and practice was his agency in originating and sustaining the Medical Department of Yale College. This leads me to speak of another and large division of the labors of his life—that of a Teacher of Medical Science, and a Professor in the Medical College. The origin of that College was due chiefly to two men, Dr. Eli Ives and Professor Benjamin Silliman, acting under the suggestions and inspiration of that eminent friend of science, Dr. Dwight, President of Yale College. The Medical College, or rather the Medical Department of Yale College, was organized in 1813, by the appointment of five Professors, viz. Æneas Monson, Nathan Smith, Eli Ives, Benjamin Silliman, and Jonathan Knight. Dr. Monson was appointed Professor of Materia Medica and Botany, with Dr. Ives as his Associate. Dr. Monson, however, on account of his great age—being then about eighty years old—declined the active duties of the Professorship, which were wholly performed by Dr. Ives. In that department he continued for sixteen years—from 1813 to 1829—when, upon the decease of Professor Nathan Smith, he was transferred to the department of the Theory and Practice of Medicine. In that department he remained twenty-three years—from 1829 to 1852—when, owing to his advanced age and increasing infirmities, he resigned, and his place was filled by the appointment of Dr. Worthington Hooker. We thus see that in the duties of Professor in these two departments he was employed for almost forty—thirty-nine—years.

As to the manner in which he performed those duties, I am able to quote the language of Dr. Knight, in an Address delivered at the Opening of the new College Building in York street. He says: "Of the two early instructors[*] in this institution, who, though retired from their active duties here, are still living, it would be unbecoming, as it is unnecessary, for me to speak at length. A few words, however, I hope will be allowed. When this institution was established, they were both in the very prime of early manhood, both well prepared by their previous studies and labors for their respective stations, and both performing the duties of those stations with great zeal and fidelity and with eminent success."

The beneficial influence of Dr. Ives upon medical science and skill, in his agency in originating the Medical Department, and during his forty years of service as Professor, may be seen, in some measure, by estimating the influence of that Institution and also the influence of about fifteen hundred students, who received their medical education in part from him.

The merit of Dr. Ives, as a Medical Lecturer, was chiefly in the matter of his lectures. His manner was not attractive, owing to the feebleness and huskiness of his voice and to his indifference to the graces of oratory. But his matter was excellent—very instructive—conveying vast funds of information—giving a thorough discussion of the subject in hand, and inspiring confidence of its accuracy. His mode of arrangement was his own, and miscellaneous and discursive, yet conveying the needful knowledge effectually and acceptably. And the whole was illustrated and enlivened by frequent pertinent anecdotes, of his own and others' experience, which presented the subject to the minds of students in the concrete.

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[*] Dr. Eli Ives and Professor Benjamin Silliman.

The zeal and enterprise of Dr. Ives in behalf of science were not confined to the department of medicine. He was a lover of all truth, and a general student and scholar. He was interested and active in the Horticultural Society and in the Pomological Society, of both of which he was President. Many years since, also, he proposed and did much by his personal labor and expenditure to establish a Botanical Garden in connexion with the Medical College.

The influence and labors of Dr. Ives in promoting the great Temperance Reformation, which began from thirty to forty years since, ought not in this sketch to be omitted. When that reformation began, on the principle of total abstinence from the use of intoxicating drinks as a beverage, he hesitated, because he knew, and has always held, that such drinks have a good use in some cases of disease, and of tendency to disease. But he said that, when he took the college catalogue, and when he surveyed other lists of his early friends, and saw how many of them had died drunkards, he could hesitate no longer; and he freely gave his influence to the enterprise, frequently speaking at public meetings, and in various ways giving his testimony in its behalf. That influence was great, on account of his deserved reputation, especially as a scientific man.

Finally, Dr. Ives had a thorough and rich Christian experience. He had a profound and full knowledge of the truths of the gospel, and loved them devotedly, and endeavored, by the divine help, to conform his heart and life to them.

It is now about nine months since Dr. Ives was, for the most part, confined to his house. From that time, his frame, for the greater part of his life battling with disease, gradually yielded to its fatal power. His mind enjoyed, during all these months, the resignation, the cheerfulness, the hope, and the peace of the humble and assured Christian. For the few last weeks of his life, his bodily sufferings were great; but he bore them with Christian patience and meekness; and, worn out by them at length, he expired at four o'clock on the morning of Tuesday, October 8th, 1861, at the age of eighty-two years and eight months.

Correspondence.

NECESSITY OF A LUNACY COMMISSION.

[To the Editor of the American Medical Times.]

SIR:—In a former brief communication, reference was made to the condition of the insane distributed throughout the State in the county institutions, without special preparation for that purpose; and requiring general supervision in order to render even the existing laws, in relation to them, in a desirable degree satisfactory and profitable to the interest and honor of the State and community; and especially to investigate the condition of the insane inmates.

To show more clearly the views which others entertain in relation to this department, permit me to transcribe a petition lately issued by the Oneida County Medical Society, which reads as follows, to wit:

"*To the Honorable the Legislature of the State of New York.*

"The undersigned would respectfully represent, that they are credibly informed that more than two thousand of their fellow citizens, who are not guilty of any crime, but laboring under the affliction of insanity, are confined in the poorhouses and almshouses, without any care or protection from the State, except such as is furnished by these institutions.

"It is well known that the poorhouses and almshouses are not adapted to the cure of insane patients, and that the keepers are often entirely ignorant as to the proper treatment of such persons.

"Their condition in such institutions is often wretched in the extreme; surely it is not creditable to the proud State you represent, or its enlightened Legislature, longer to tolerate this relic of barbarism. We would, therefore, respectfully ask of your honorable body, that a properly qualified medical man be appointed a commissioner whose duty it should be to make a personal examination into the condition of the insane in the State, and report to the next Legislature, with such suggestions for their relief as may be deemed proper."

This petition is designed for general distribution, and it is presumed that all into whose hands it may fall, will attend to the request made in the accompanying circular.

It was originally designed that the duties of the commission should extend also to the administration of legal justice in cases of the insane criminal.

Upon the importance of this permit me to say, that this suggestion had its origin in the fact that the scientific physician is the only individual on earth, capable, or in any way prepared, to investigate insanity in all its shades. Who was it that first disproved the assumption that the miserable victims of insanity were the special subjects of Divine displeasure, forsaken of God and possessed of devils, to be regarded universally as objects of harm and detestation? And, as it has been further said, "nobody doubted, not even the wisest, best, and most humane, that dungeons and chains and stripes were deserved by the heaven-abandoned wretch, and were at the same time the best and only means of his restoration; we shudder at these terrible records of ignorance."

Again; no longer back than 1843, it is said that "the British House of Lords called upon the realm to declare authoritatively in their collective capacity, what state of mind constituted insane irresponsibility. They decided that the plea of insanity was only admissible where it was proved that the criminal was *incapable of distinguishing right from wrong when he committed the crime.*"

The fallacy of this decision is best disproved by referring to the fact that, in *America*, our insane establishments are governed mainly upon the principle that the insane have the knowledge of right and wrong. But John Bull is very sluggish in many particulars, while the vigilance of young America is even becoming a place-word. It is now well known that a certain per cent. of crime is committed by the insane; and it may be asked with emphasis, how large is that percentage? Not long before the commencement of the present century but little had been done to save this class of irresponsibles from capital punishment. If the crime of murder was committed by one whose insanity had been established previously, the way was clear; but if by one upon whom no strong suspicion had fallen, or some slight indications of diseased mind should happen to be discovered after the act, the prejudices of the community were so great against ascribing the commission of the act to any state of mind that would exculpate the criminal, that even an attempt at investigation would be baffled. The sentiment had attained such strength that you would often hear a taunting reference made to even a plea of insanity.

A man deliberately and premeditatedly takes his gun, and walks forth to take vengeance upon unfounded jealousy, which had preyed upon his mind until it had become a mania; a son shoots his father for an imaginary wrong which he had dwelt upon until the act could not be restrained; a wife poisons a husband, and a mother a child, for the purpose of effecting some, to her, desirable change which she had brooded over until her "brains grew addle;" and these things are done by a class of persons who afterwards manifest no regret or remorse for having committed the act. Who is so competent to have the management primarily of such cases, or to be empowered with legal authority to dispose of them, as the physician? The culprit is arraigned at the bar of justice, and if the plea of insanity is introduced, witnesses are summoned for and against, and a war of opinion is commenced; conflicting testimony, professional and other, is presented to court and jury, and after a week's labor of this kind who would believe that a jury of twelve men could agree as to the sanity of the prisoner; but he is arraigned for murder, and that they can agree upon, and he is pronounced guilty. What follows? Measures may or may not be instituted to lay the case before the Governor, and if it is, he appoints a special commission of medical men, and he is governed in his action by their decision.

Another marked difference in these results is to cost the counties thousands, instead of as many hundreds of dollars to dispose of a case. Is there not much connected with this that calls for improvement? and is not the State of New York ready to take the lead in a reform so much needed? If the laws regulating this thing have been made by men who have overlooked the interests and necessities of this department, let the Legislature now interpose, and place the management of it in proper hands, for a wise, humane, and economical adjustment. And now, in the adjudication of matters belonging to the insane criminal, we ask, what class of persons in the community is best prepared to collect, and, when collected, to analyse, the facts in relation to them without prejudice or bias?

The judge is governed in the main by medical testimony; the jury can look to no other source to be rationally enlightened. From all that pertains to their education and experience, as well as everything connected with their profession, the enlightened of the age make the admission, and it is very clear that if a board of medical men could be legally formed, there would be left but little room to question the result. Yours, &c.

L. B. C.

Army Medical Intelligence.

SURGEONS IN THE GREAT NAVAL EXPEDITION.

First Brigade.—J. C. Dalton, Surgeon; Albert A. Moulton, Surg., B. F. Eaton, Assist. Surg. to 3rd N. H. Vols.; Henry Hovet, Surg., Otto Schenck, Assist. Surg. to 46th N. Y. Vols.; W. V. White, Surg., W. H. Tanner, Assist. Surg. to 47th N. Y. Vols.; A. Perry, Surg., J. Mulford, Assist. Surg. to 48th N. Y. Vols.; P. Fisher, Surg., J. S. Houghton, Assist. Surg. 8th Me. Vols.

Second Brigade.—Geo. B. Kemble, Surgeon. Surgeons of Regiments not obtained.

Third Brigade.—J. J. Craven, Surg.; —— Dixon, Surg. to 4th N. H. Vols.; F. Bacon, Surg. to 7th Ct. Vols.; Joel Richardson, Surg., C. C. Tuck, Assist. Surg. 9th Me. Vol.

Surgeons of Gunboats.—Alabama, O. A. Gibson; Augusta, W. H. Holmes; Bienville, J. T. Coates; Seneca, N. L. Beaty; Monticello, S. D. Klagg; Quaker City, E. B. Dalton; Unadilla, R. L. Weber; Florida, J. C. Cohen; Ottawa, C. O. Carpenter; James Adger, T. Atwood; Mt. Vernon, M. H. Henry; Pembina, A. W. H. Hawkins; Vandalia, C. Eversfield, and H. T. McSheary; Sabine, M. C. Delancy, and R. G. Freeman; Roanoke, G. Clymer, and G. C. Spear.

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John Moore, M.D., Surgeon U. S. Army, who has been stationed at Camp Scott, Utah, for the last three years, returned to Washington in charge of the troops from that station, and has been assigned to duty at the Military Hospital at Cincinnati, Ohio. **John J. Milhau**, M.D., Surgeon U. S. Army, long stationed on the Pacific coast, and recently member of the Army Board of Medical Examiners, at San Francisco, has returned to Washington, in charge of troops.

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VISIT TO THE HOSPITAL AT SPRINGFIELD, MO.

[Army Correspondence of the American Medical Times.]

Springfield, Green Co., Mo., Nov. 9, 1861.

We arrived here last Monday, after a forced march of sixty miles. To-day I passed through the main hospital with Dr. Melcher, who has been in charge of all the sick and wounded since the fight at Wilson Creek, also about twenty-five additional, wounded at this place on the 24th October in the action that took place between two hundred and eighty of Gen. Fremont's body-guard and eighteen hundred of the enemy, in which the latter were defeated. There are still quite a number of the wounded of Wilson Creek remaining, but nearly all are so far recovered as to be able to ride as soon as an opportunity presents to send them to St. Louis. Measures are being taken to send them forward immediately. The doctor informed me that owing to the distance of the battle-field from town (9 miles), lack of ambulances, and teams, and great number wounded, and lack of surgical attendance, no primary amputations were performed. That all secondary amputations of the thigh had proved fatal, also several of the leg and arm. I was shown several cases of compound comminuted fracture of the thigh, leg, and arm, in all of which the bone had united, and some healed up permanently, and in others there was more or less of exfoliation, but with every prospect of final recovery.

I saw one case of badly shattered ankle-joint, by a large grape-shot burying itself within. The shot was removed, and the doctor said the limb would have been amputated, only that there was no adhesive plaster in town; he says, adhesive plaster saved that leg, for the man will have good use of it.

Another case of interest was shown where a musket ball had passed through the thigh on a line with the great ischiatic nerve; the consequence is paralysis of the flexor muscles of the toes and ankle-joint.

Considering the number of cases, the serious character of the injury, and the result in all of them that I saw, I can but come to one conclusion, that many, very many limbs are removed that might be saved, and this I will show at some future time. Dr. Barnes, the Medical Director of this post, informed me there were but four hundred and seventeen sick in hospital this morning, and this includes most of the sick of the vast army now collected at this place; considering the season of the year, and forced march made by most of the regiments, it shows a very healthy state. In my own regiment the measles is the great trouble, though of very mild grade; dysentery, diarrhœa, some pneumonia, intermittent and remittent fever are the prevailing diseases in camp and hospital, the latter in many instances assuming a typhoid character. The weather is very fine, and we all feel anxious to move somewhere, anywhere, but what the programme is to be I know not.

Charles H. Rawson,
Surgeon 5th Iowa Vols.

Medical News.

Inebriate Asylum at Binghampton, N. Y.—Dr. Valentine Mott was recently installed President of this institution.

Cholera has been making terrible ravages in Candahar, India; 8,000 fell victims to it in eighteen days.

The *insanitary* condition of the Southern army is frequently noticed; added to the universal epidemic of parricide, are suicide, homicide, small-pox, black measles, typhus, &c.

Naval Appointments from Massachusetts.—Of the forty new Assistant Surgeons required for the Navy, thirteen have been appointed from Massachusetts. The following are their names:—R. T. Edes, Chas. E. Stedman, H. M. Wells, W. C. Lyman, I. H. Hazelton, G. T. Shipley, Charles H. Perry, C. T. Hubbard, Edgar Holden, B. H. Kidder, J. H. Macomber, Samuel W. Abbott, Samuel N. Brayton.

Dr. Robert Adams has been elected to the University Professorship of Surgery (Dublin), vacant by the death of Dr. Cusack.

Hog Cholera.—The Wayne (N. Y.) Press says, that a disease termed "hog cholera," is raging among the porkers at the distilleries in Clyde. One man lost something like 1,200 hogs a short time since—the hogs dying at the rate of 60 to 100 per day.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
SESSION OF 1861–62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VII., PART II.

Definition of Râles and their Classification.—Coarse and Fine Moist Bronchial or Mucous Râles.—Sub-Crepitant Râles.—Sonorous and Sibilant Râles.—Gurgling.—Crepitant Râle, its Distinctive Characters, Diagnostic Significance, and the Mechanism of its Production.

THE auscultatory signs of disease which I have thus far considered, are all morbid modifications of the normal vesicular murmur. I come now to a group of signs which are distinguished from those already considered, in this: they are not the sounds of health modified, but they are new or adventitious sounds; they are altogether the products of disease, and have no types anywhere in the healthy chest. What generic name shall we apply to these sounds? Laennec called them *râles*. English writers have preferred to use the Latin terms *rhonchus*, *rhonchi*. The latter terms are objectionable on account of their roughness. If you were to tell a patient that he had a "rhonchus" in his chest, he would imagine that it was something formidable, while, if you said that he had a "râle" he would not be alarmed. The French term is more euphonic, and I think we should continue to use it.

There is generally a very mistaken notion in the minds of those who have given little or no attention to physical exploration as regards the importance of the râles. They are apt to suppose that knowledge and skill in auscultation relate chiefly to these adventitious sounds. This is far from being true. The abnormal modifications of the respiratory sounds which have been considered, are vastly more important than the râles. The greater part of the latter are comparatively unimportant. They oftener annoy us, instead of affording valuable information, by obscuring or drowning more important signs pertaining to the respiration.

Another mistaken notion is, that the râles constitute an intricate portion of auscultation. This notion has arisen from the fact, that some writers have made numerous minute and useless distinctions. Were all the varieties of adventitious sounds to be described as separate signs, the subject would indeed be complicated, for the number of râles might in this way be multiplied indefinitely. It answers all practical purposes to arrange the different sounds into a few classes, considering each class as constituting a single sign; and the classification is so simple that I hope to be able in a few words to make the subject intelligible.

The râles, in the first place, are divided into those which are dry and those which are moist. The moist râles convey to the mind the impression of moisture or of the presence of liquid. They are for the most part produced by air bubbling through liquid, and hence they are sometimes called bubbling sounds. The dry râles, on the other hand, do not convey any impression of moisture: these are sometimes called the vibrating râles.

Next, they are divided according to the particular situation in which they are produced. Both dry and moist râles may be produced within the bronchial tubes, and they differ accordingly, as they are produced in the larger sized or the smaller tubes. A single moist râle is produced within cavities more or less filled with liquid; and a single dry râle is produced within the air vesicles.

Now, what are the moist bronchial râles? They are three in number, viz. coarse, fine, and subcrepitant râles. If you blow into a large sized tube containing liquid, you produce a character of sound due to the large size of the bubbles, which may be distinguished as coarse. The bubbling sound in the larger sized bronchial tubes has this character. Coarse moist bronchial râles are, therefore, situated in the larger sized bronchial tubes. They denote the presence of liquid in these tubes. The liquid is generally mucus, and, hence, all the moist bronchial râles are frequently called mucous râles; but they may be due to other kinds of liquid, viz. serum, pus, and blood. Coarse, moist, or mucous râles may, therefore, occur in connexion with any disease in which liquid accumulates in the large tubes. This râle is represented on an exaggerated scale when liquid accumulates within the trachea, as it often does in the last moments of life, the sounds being loud enough to be heard at a distance: these are tracheal râles or the death rattle.

When the bubbling sounds come from smaller tubes, they are said to be fine. The impression conveyed is that of small bubbles. The fine râles signify the presence of liquid—mucus, serum, pus, or blood—situated within the smaller tubes. They occur in certain cases of bronchitis in the second stage, *i. e.* after mucus is secreted in abundance, and, in this affection, they are likely to be present on both sides of the chest, for bronchitis is one of the symmetrical diseases, affecting both sides about equally, if it be primary, and not a complication of some other pulmonary affection. If the mucous râles, whether coarse or fine, are confined to a circumscribed space at the summit of the chest, they denote that the bronchitis is secondary, and in all probability it is a complication of tuberculosis; hence, thus limited, these râles belong among a group of signs which denote, inferentially, the existence of tubercle. But they are incident also to pneumonia, to abscesses evacuating through the lung, and to hemorrhage.

The coarse and fine râles, especially as connected with bronchitis, are very variable, being now present and now absent, now at this point and now at another point; which is intelligible enough when we consider that the mucus is not stationary, but shifting its situation as it passes onward to be expectorated. The subcrepitant râle is neither more nor less than a fine mucous or moist bronchial râle. The reason for calling it by this name will appear presently; the râle comes from the minute bronchial tubes. It is a valuable sign, as denoting that rare and dangerous variety of bronchitis called capillary bronchitis. When it exists on both sides of the chest, and is more or less diffused over the chest, it generally denotes capillary bronchitis. With regard to the three varieties of moist râles, this is to be borne in mind: they are heard both in inspiration and expiration, in either act singly, or in both acts.

The dry bronchial râles consist of two varieties only, viz. the sonorous and the sibilant. The distinction is based on the pitch of the sound. If the sound be low in pitch it is a sonorous râle; if high in pitch, it is a sibilant râle, or, as it is sometimes called, a whistling râle; the varieties of each, as regards the characters of the sound, aside from the pitch, are numerous, but they are of no practical consequence. Both kinds are often musical, especially the sonorous kind, the sound resembling the note of a bass-viol or bassoon, the cooing of a pigeon, etc. Both râles may accompany the inspiration or the expiration, either alone, or together. The sonorous, however, is oftener heard with expiration, and the sibilant with inspiration; both may be heard at the same time, the sibilant with inspiration, and the sonorous with expiration.

The dry râles signify contraction of the calibre of the bronchial tubes at certain points, generally in consequence of the adhesion of tenacious mucus too dense and viscid to produce bubbling sounds. As thus produced they belong to bronchitis, especially in the early stage, before the mucus becomes abundant. Spasmodic contraction of the muscular fibres of the bronchial tubes also gives rise to these râles in a marked degree, especially the sibilant. This is the pathological condition in asthma; and the dry râles are often so loud in this affection as to be heard at a distance. As a rule, the sonorous râle is produced within the larger, and the sibilant within the smaller tubes.

The dry, as well as the moist, bronchial râles are apt to be fugacious, being present at this moment and absent the next. This is true of them as they occur in bronchitis, but in asthma they are more persisting. That they are due to spasm in the latter affection is proved by the rapid disappearance—even in a few moments—in certain cases in which we succeed in procuring for the patient sudden and immediate relief, as sometimes happens, for example, under the use of chloroform by inhalation.

The single moist râle produced within cavities is well described by its name. It is called gurgling. This term gives the idea as well as any lengthened description could do. It is a gurgling sound produced by the agitation of liquid and large bubbling within a space of considerable size partially filled with liquid. It occurs sometimes, under these conditions, in a tuberculous cavity, which communicates by large openings with the bronchial tubes. It is quite distinctive of a cavity.

The single dry râle produced within the air vesicles is a highly important sign. It is, of itself, more diagnostic of a particular disease than any other one of the physical signs. In fact it may be considered as almost pathognomonic. It is called the crepitant râle. The true crepitant râle is the sign of pneumonia. The instances are few in which it is not a sign of this disease; but it is not invariably present in cases of pneumonia.

The distinctive characters of the crepitant râle are well marked and simple. Bearing them in mind, after you have had a few illustrations of the sign, you will never have any difficulty in recognising it. What are these characters? The sound is dry; it conveys no impression of moisture. It appears to be made up of a great number of dry minute cracklings. In both these particulars it differs from the only sign with which it is liable to be confounded, viz. the subcrepitant.

The subcrepitant râle approximates in its characters to the crepitant, and here is the reason of its having been called the subcrepitant râle. But it is a moist bronchial râle, and it appears to be composed of minute bubbles of unequal size. There are, however, other distinctions, one of which is very important. The true crepitant râle is heard only in inspiration, never in expiration, while the subcrepitant may be heard in either act and in both acts. If, therefore, a sound, concerning which you may have doubt, be heard in expiration, it must be a subcrepitant râle. Another point of distinction is, the crepitant râle is quickly evolved, like a flash of gunpowder, to which it has been compared, while the subcrepitant râle is developed under the ear more slowly. Another point is, it persists for a certain period, and is not fugacious like the moist bronchial râles.

We may define the true crepitant râle in a few words by saying that it has a dry crackling sound heard only in inspiration. Why is it thus dry, and limited to the inspiration? This question leads me to state the mechanism of this sound. In general, gentlemen, as you have observed, I have said very little respecting the mechanism of the auscultatory sounds. This branch of the subject is not without interest and importance; but I repeat what I have said before, the practical value of physical exploration does not depend on our ability to offer correct explanations of the manner in which the phenomena are produced. The diagnostic significance of the signs rests wholly on the results of clinical observation, in connexion with the results of examinations after death. And in the limited time allotted to these lectures, I wish to treat of the subject wholly in a practical view. Were I to enter into discussions relative to the mechanism of the signs, I should feel, much more than now, the difficulty of compressing into this short course of lectures the practical information which I desire to give.

Concerning the mechanism of the crepitant râle, however, I will say a few words, because I am satisfied that the explanation generally given is erroneous, and, moreover, the true explanation, as I believe, was given by one of our countrymen, Dr. Carr, of Canandaigua, in this state, in a communication made to the *American Journal of Medical Sciences* more than twenty years ago.

The explanation generally given of the crepitant râle is, that it is produced by minute bubbles in the air vesicles and capillary tubes. Now, if this were the correct explanation, why should the sound be perfectly dry, as is the fact? Again, why should not the bubbles be produced by the air in expiration as well as in inspiration, as is the fact with the bubbling sounds elsewhere in the air passages? Dr. Carr's explanation is not only sufficient to account for the sound, but it accords with all the facts pertaining to it. His explanation is as follows: In the first stage of pneumonia a viscid adhesive exudation takes place into the air vesicles and capillary tubes. This we know to be the fact; it is this exudation which gives the viscidity or adhesiveness to the characteristic expectoration in this stage of pneumonia. Now, at the end of the expiratory acts, the walls of more or less of the air vesicles and capillary tubes are glued together by means of this sticky substance, and, when separated by the act of inspiration, the separation causes the crackling sounds. The râle can be imitated most perfectly by placing between the index finger and thumb a little paste or solution of gum, and alternately pressing and separating the surfaces near to the ear. This explanation accords with the fact of dryness of the sound; with the fact that the minute cracklings appear to be equal; with the fact that the sound is evolved quickly, and sometimes limited to the end of the inspiratory act; with the fact (which I have not before stated) that the râle belongs especially to the first stage of pneumonia; and lastly, with the fact that it is heard only in inspiration.

Laennec did not ascertain all the characters which distinguish the crepitant râle, and hence he confounded the crepitant with the subcrepitant. This led him to describe the crepitant râle as generally returning in cases of pneumonia during the stage of resolution. It does sometimes return in this stage, and it is then called the crepitant râle redux; but, in general, it is the subcrepitant, not the true crepitant râle, which is heard during convalescence from pneumonia. As I have stated, the crepitant râle is the sign of pneumonia. If, in connexion with symptoms pointing to this disease, we find this râle well marked, the diagnosis is complete. But, I repeat, the râle is not always present in cases of pneumonia. It is, however, much oftener present (at all events in cases of pneumonia in this country) than is stated by Skoda, of Vienna. Skoda states that it is rarely present in pneumonia. It belongs especially to the first stage of the disease. It either ceases, or is greatly diminished, when the exudation is sufficient to fill the air vesicles and solidify the lung. Again, it may reappear as the exudation goes off.

Let me point out the circumstances under which this sign may be produced, with a few inspirations, when pneumonia is not present. If a feeble patient have lain upon the back for some time, breathing feebly, and he be suddenly made to assume the sitting posture, and to take a full inspiration, we obtain often a well marked crepitant râle. It continues, however, during a few forced inspirations only. The explanation is, the lungs having been but little expanded for some time, the walls of more or less of the cells and capillary tubes have become agglutinated sufficiently to give rise to the sound when they are separated by a full expansion of the lungs. I have known repeatedly an erroneous diagnosis of pneumonia to be predicated on the sign as thus produced. It is important then to observe whether the sign, when it occurs under these circumstances, be transient or persistent. It is generally also, under these circumstances, heard on both sides, while in the vast majority of the cases of pneumonia it is limited to one side.

A crepitant râle is sometimes heard within a circumscribed space on one side of the summit of the chest. It then proceeds from a circumscribed pneumonia, which is, in general, evidence of a deposit of tubercle. Under these circumstances, the crepitant râle becomes, inferentially, a sign of tuberculosis. The same is true of a subcrepitant râle. If the latter be confined within a circumscribed space of the summit of the chest on one side, it denotes a circumscribed capillary bronchitis, or the presence of liquid in the small capillary tubes, within the circumscribed space; and clinical observation shows that this is apt to occur in cases of tuberculosis, and rarely save in that connexion. These belong to a group of accessory signs of tuberculosis, which are sometimes of much practical value in the diagnosis of that affection.

In my next lecture (which will be the last of my present course) I shall notice two additional râles, and consider the vocal signs obtained by auscultation.

Original Communications.

THE TREATMENT OF

FRACTURES BY PLASTER OF PARIS SPLINTS.

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The use of plaster of Paris in the treatment of fractures dates from a very early period.

Eaton, an English consul at Bassora, about the close of the last century, saw it employed by the Arabians. It was first employed in Europe by Hendrikes, at the hospital of Gröningen, in 1814, and afterwards by Hubenthal, Kyle, and Dieffenbach.

By these surgeons it was used in a very clumsy manner. Dieffenbach poured the plaster over the limb, so as to inclose it in a solid casing; and it was necessary to use the hammer and chisel, in order to break the mould to remove it, thus jarring the limb and running the chances of injuring a newly consolidated fracture. These moulds have been justly called by Hamilton "heavy stone coffins, they might serve well enough the purpose of interment, but they are wholly unsuited to the purposes of a splint." A. Pirogoff, of St. Petersburg, in the year 1854, published a monograph on a new method of bandaging fractured limbs with linen soaked in a solution of plaster of Paris. His method was as follows:—The limb was first bandaged and the depressions filled with raw cotton, then splints of the coarsest linen saturated in a solution of the plaster were applied lengthways to the limb, and fastened crossways with strips saturated with the same material. Dr. Weber, of this city, reported a case treated in this manner in the *New York Journal of Medicine*, for May, 1856. Other similar methods have also been recommended. Bandages with the meshes filled with dry plaster have been applied to the limb and then wetted with cold water; the plaster hardening in a few minutes, formed a solid casing for the limb.

But all these methods had fallen into disuse, until recently, when Maisonneuve, of Paris, revived the use of this substance in the construction of splints for fractures. His method of applying it is somewhat similar to that of Pirogoff, and has been fully described in former numbers of this journal by Drs. Smith and Swan, in their letters from Paris. About three months ago it was applied for the first time in the New York Hospital, in a way somewhat different from that of the French surgeon. It answered the purpose so admirably, that its use was followed up until now it has almost entirely supplanted the starch bandage, and in many cases the side splints. Its advantages are; its facility of application, and its perfect adaptation to the limb, being borne by the patient better than any other form of apparatus. Although we have applied it more than twenty times, and in every case directly against the integument, yet in no instance has it given rise to any undue pressure over the malleoli or heel—points which are apt to trouble the surgeon considerably. Another interesting feature may be stated, that it has never produced any excoriations, but, on the contrary, in several instances where it has been applied over denuded surfaces, it has apparently exercised a healing effect.

Its advantages over the starch bandage are its rapidity of drying and hardening, the plaster taking about five minutes "to set," *while being held by the surgeon in its proper position;* the starch apparatus requiring several days to dry unless artificial heat is applied. Another advantage is, that the limb can be inspected daily if necessary, without removing all the apparatus. It, therefore, can be applied much earlier than we have been in the habit of resorting to the starch bandage. It may be well to state that the starch apparatus has been generally used in this institution only after the fracture has become tolerably firm, since in several instances where it has been applied early in the treatment, marked deformity has resulted. But the plaster of Paris casing allows the anterior surface of the limb to be exposed, and any displacement can consequently be readily detected.

Its advantage over the gutta percha is its great *porosity*, keeping the limb perfectly dry without confining the perspiration, and thus doing away with one cause of irritation and excoriation. It does not require padding like the gutta percha, and it is much cheaper, an important item in hospital practice.

The mode of application to the leg is as follows:—The limb is first shaven or slightly oiled; a piece of old coarse washed muslin is next selected of a size so that when folded about four thicknesses it is wide enough to envelop more than half of the circumference of the limb, and long enough to extend from a little below the under surface of the knee to about five inches below the heel. The solution of plaster is then to be prepared. Fine, well dried, white plaster had better be selected, and before using a small portion should be mixed with water in a spoon and allowed "to set," with a view of ascertaining the length of time requisite for that process. If it is over five minutes, a small quantity of common salt had better be dissolved in the water before adding the plaster. The more salt added, the sooner will the plaster "set." If delay be necessary, the addition of a few drops of carpenter's glue or mucilage will subserve that end. Equal parts of water and plaster are the best proportions. The plaster is sprinkled in the water and gradually mixed with it. The cloth, unfolded, is then immersed in the solution and well saturated; it is then to be quickly folded as before arranged and laid on a flat surface, such as a board or a table, and smoothed once or twice with the hand in order to remove any irregularities of its surface, and then, with the help of an assistant, applied to the posterior surface of the limb. The portion extending below the heel is turned up on the sole of the foot, and the sides folded over the dorsum and a fold made at the ankle on either side, and a roller bandage applied pretty firmly over all. The limb is then to be held in a proper position (extension being made if necessary by the surgeon), until the plaster becomes hard. The time required in preparing the cloth, mixing the plaster, and applying the casing to the limb, need not take more than fifteen minutes. After the plaster is firm and the bandage removed, we will have a solid plaster of Paris case partially enveloping the limb, leaving a portion of its anterior surface exposed to view. If any swelling occurs evaporating lotions can be applied to the exposed surface, and we can always easily determine the relation of the fractured ends. If necessary an anterior splint, made of the same material, can be applied, and then both bound together with adhesive plaster, and if desirable a roller bandage over all. If the anterior splint is not used, two or three strips of adhesive plaster, one inch wide, or bands of any kind, may be applied around the casing, and will serve to keep it firmly adjusted to the limb. Thus applied, we have a most beautiful splint, partially enveloping the limb, making equal pressure, light, and allowing the patient to change his position in bed, or to sit up in a chair, or go about on crutches; and a splint which can be easily made in any place where plaster is to be had.

This mode of dressing may be applied with great advantage in most cases of fractures of the tibia and fibula. In oblique fractures of the tibia with the projection of the superior fragment, it is well known how difficult it is to overcome the deformity; with the plaster of Paris splint, however, the results have been all that could be desired. After extension of the limb on the part of an assistant for the sake of bringing the fragments into perfect apposition, and while thus held, the plaster splint should be applied and allowed to harden.

The limb is thus perfectly immovable. A strip of two or three thicknesses of muslin, about three inches wide, saturated with the plaster, may be applied transversely, if necessary, over the upper fragment so as to bind it down in position. The cases in which this mode of dressing is not applicable, are those of fracture of the fibula with rupture of the internal lateral ligament, or, what is more common, a chipping off of a portion of the internal malleolus with the turning of the foot outwards. Where the deformity is considerable it cannot always be overcome at once, but requires steady pressure, with properly arranged pads, and the side splints, to bring out that result. This effected, to a certain extent, the plaster apparatus may be applied with advantage. In cases of fracture of the fibula, without any displacement of the foot, it may be applied early in the treatment; upon the entire subsidence of the swelling it will become necessary to apply a new one. This second dressing in most cases will be sufficient for the remaining treatment. The following cases of fracture will serve to illustrate the applicability of this new apparatus.

Case I.—*Ununited Fracture of the Leg.*—Francis Wyncoop, æt. 26, admitted May 19 (Dr. Buck, attending surgeon), with a compound oblique fracture of right leg, at the lower third. The wound was very small, and situated on the inner side of the limb. Leg was placed in fracture box, and wound covered with lint and collodion. The wound closed, and for about three weeks the case progressed favorably. At about the commencement of the fourth week the wound opened afresh. At the end of the twelfth week no union had taken place, and the wound was filled with exuberant granulations, and a free discharge kept up. The bone was not exposed. August 13, the limb was placed in the plaster of Paris apparatus applied next to the integument, and a small fenestrum made over the wound so as to allow of its being dressed without removing the splint. Patient was able to get up, and in a short time regained strength enough to go about on crutches in the open air. From this time the fracture began to unite, and on October 26 he was discharged cured. In this connexion, it may be remarked that no complaint was made of any undue pressure over the salient points of the limb.

Case II.—Benjamin Witwitz, æt. 44, admitted August 16, 1861 (Dr. Parker, attending surgeon), with an oblique fracture of both bones of the left leg at the junction of the middle and lower thighs: the line of fracture was from within upwards and outwards. Limb was placed in a fracture box and evaporating lotion applied. On the *fourth day*, the swelling being very inconsiderable, the plaster splints were applied, the limb being held in the proper position while the plaster hardened. The next day the patient was allowed to get up, and go about on crutches. Although this was applied so soon after the accident, still there was no complaint on the part of patient. Patient was discharged cured on October 1, without any deformity.

Case III.—Mary J., æt. 30, admitted October 16 (Dr. Buck). Patient while intoxicated was pushed from a stoop and sustained an oblique fracture of left tibia, at about the middle. The fracture of the fibula was about wo inches above that of the tibia. Limb, at first, was placed in fracture box. On the *fourth day* after the injury the plaster splint was applied, and it remained on until patient was discharged. At time of discharge union was firm, and there was no deformity.

Case IV.—Jas. Lockwood, æt. 43, admitted Nov. 1 (Dr. Buck), with fracture of tibia at lower third, and fibula at upper third. Plaster splint *applied on fifth day*, and patient next day was up on crutches. Same dressing remained on until union was completed. No deformity.

The following cases have been kindly furnished me by Dr. D. B. St. John Roosa, of the second Surgical Division, who, by permission of the attending surgeon, applied the apparatus in accordance with the rules previously laid down.

Case V.—*Fracture of Fibula and Tibia.*—John H., æt. 25, Ireland, admitted Oct. 6 (Dr. Watson). A few moments before admission, fell from a window, a distance of about eighteen feet; force of fall upon right leg. There is found a fracture of the fibula, about four inches above the lower end, also a chipping off of the internal malleolus. Deformity slight. Placed in fracture box. Oct. 10, placed in plaster of Paris splint. In a few hours after, the patient was up and about. Oct. 23.—Fracture has united; patient now bears weight of his body on the part. Nov. 4.—Splint removed; no deformity; discharged cured.

Case VI.—*Fracture of Tibia and Fibula.*—Boy, æt. 8, admitted September 12 (Dr. Buck). Heavy stone fell on the left leg; fracture of tibia; junction of middle and upper third; line of separation, oblique from within upwards and outwards. Fibula also fractured at a point one inch below. Treatment: placed in fracture box; remained in till September 20; side splints applied, and on October 1, eighteen days after injury, when slight union had occurred, plaster of Paris splint applied; and patient immediately went about on crutches and continued to do so until October 25, when he was, with firm union and no deformity, discharged. Here it would be fair to state that the apparatus would have been applied earlier had attention been called to it.

Cases VII. and VIII.—This surgical expedient has also been used in *two cases of compound fracture of the leg.* The first, a young man, æt. 23, admitted November 16, having sustained his injury by being partially buried beneath a bank of earth. On examination there was found a compound fracture of the left tibia and fibula at about the junction of the lower with the middle third; fracture, oblique from within upwards and outwards. The wound was nearly transverse, one inch in length, exposing the bone, and situated on the inner side of the limb opposite the fracture. The finger could be pushed under the integuments for about three inches above the wound; hemorrhage quite free. The wound was closed and covered with a piece of lint saturated with collodion, and the limb placed in the fracture box until the visit of Dr. Buck, the attending surgeon, and by his request the plaster splint was applied, no swelling to any extent having yet occurred. After its adjustment the patient expressed himself warmly in favor of the comfort of the apparatus. The evaporating lotion was applied to the anterior exposed surface of the limb. By this splint the most essential indication in the early treatment of compound fractures was fulfilled, namely, *the perfect quietude of the limb.* The foot being firmly clasped by the splint, no motion of any amount could be communicated to the fracture. Six days after the injury, the lint over the wound was removed and a healthy granulating sore was found; no undue inflammation or swelling existed around it. This case is still under treatment and doing well; no suppuration except from surface of sore; no burrowing.

The other case (VIII.) was that of a man aged 51, admitted November 21, with a very oblique compound fracture of the tibia and fibula. The obliquity was without, inwards and downwards. The wound was very small, and situated over the inner side of the limb opposite the fracture. The swelling was very considerable. The wound was closed with lint saturated with collodion, and the limb placed in a fracture box. During the night the muscular spasm would displace the fracture, and cause the lower end of the upper fragment, which was very sharp, to push against the integument, threatening perforation, causing the patient considerable pain. On the second day, by permission of Dr. Buck, the plaster splint was applied, and two strips of muslin of four thicknesses and about three inches in width were saturated with a solution of plaster and applied over the upper fragment, binding it down into position. Cooling lotions were applied over the exposed surface of the limb. This dressing brought the limb into pretty good position, and afforded considerable comfort to the patient. At the suggestion of Dr. Buck the limb thus dressed was placed in a bran bed made in a fracture-box, and thus still more secured from all motion. On the fourth day the swelling subsiding, the splint became loose, and allowed the lower end of the superior fragment again to press against the skin. New dressings were applied, and a strip of muslin of six thicknesses placed lengthwise over the anterior surface of the upper fragment, and bound down by a strip of four thicknesses, about three inches wide, passing around the splint. This seemed to keep the fragment from projecting. This case is now doing well.

In fractures about the knee-joint and in cases of *synovitis* where a posterior splint or knee-cap is needed in order to keep the limb in a straight or semi-flexed position, this mode of forming a splint can be made use of and answers better than the gutta percha. We have applied it to one case of synovitis after the acute symptoms had been subdued by the means of extension and counter-irritation, and it formed a very good posterior splint. *In fractures of the tarsal bones* it may likewise be used with advantage. Here it should be long enough to envelop the foot as far up as the toes.

The two following cases of *fracture of the astragalus* have been treated in this manner with good results.

Case IX.—Mary Walker, æt. 21, admitted August 31 (Dr. Parker), patient a short time before admission injured her left foot while going down stairs She had been treated outside by the application of poultices. On admission there was so much swelling about the part that a correct diagnosis could not be made; cooling and anodyne applications were used, and after the swelling had subsided bony crepitus could be distinguished, apparently between the malleoli, on moving the foot. The limb was placed in a fracture-box, and the foot well supported by the foot-board. On October 3, the plaster apparatus was applied so as to partially envelop the foot, thus keeping it immovable; patient allowed to go about on crutches. October 22.—Apparatus removed; no crepitus could be made out; foot somewhat stiff; limb bandaged, and patient directed to begin using it with the aid of a crutch. She was discharged November 18; able to walk upon the limb without external assistance.

Case X.—John Cunningham, æt. 24, admitted September 22 (Dr. Parker), having jumped from a third story window to the pavement while in a fit of delirium tremens. On admission both malleoli were found intact; patient complained of pain on pressure over the astragalus, and on moving the foot crepitus was distinctly felt; limb placed in fracture-box, and evaporating lotion applied. Patient soon became so delirious that it was necessary to remove him to the delirium tremens ward. After he had recovered from this affection and the swelling had subsided, it was carefully examined by Dr. Buck, and the diagnosis verified. The plaster casing was then applied, and patient allowed to go about on crutches. November 2.—He was discharged cured, able to walk with the assistance of a cane, though it may be proper to add that the joint was somewhat stiff.

For *fractures of the lower jaw*, it can be made use of to construct a splint in the usual manner.

In *fractures of the neck of the humerus*, where a shoulder splint, as recommended by Hamilton, is necessary, this may be made use of; it would make a much better and cheaper splint than the gutta percha, and it would fit the shoulder more accurately than any wooden splint that could be made.

In *fractures of the shaft of the bone* it may also be used. It should be long enough to extend from the shoulder to the hand, and applied to the outside of the limb, the limb being flexed to a right angle, and extension being made so as to keep the fragments in position until the plaster "sets." If necessary, a small splint made of the same material can be applied to the inner side of the arm, and both bound together with a bandage. The limb, of course, is to be placed in a sling.

Case XI.—*Fracture of both Humeri.*—Jas. Merrian, æt. 45. Admitted Nov. 1 (Dr. Buck) with a fracture of both arms, and fracture of several of the ribs and various contusions about the body. He received his injuries in consequence of having been buried in by the caving of a bank of earth. Both humeri were found fractured obliquely about their middle. Arms at first placed in guttered tin splints. On the fourth day after admission, and the sixth day after the accident, plaster of Paris appliances were resorted to and made to reach from the shoulder to the hands. As patient was compelled from his other injuries to remain in bed, the arms were placed in a slightly flexed condition. The splints reached a little more than half way round the arms. A small splint was made of the same material, which was applied to the remaining inward surface of the arm, and bound on with a bandage. At the end of the second week the splints becoming loose by the subsidence of the swelling, new splints were applied. Thus far the case has progressed favorably.

For *fractures at the base of the condyles*, and other fractures in the vicinity of and involving the elbow-joint, which require the arm to be kept in a flexed position, this is decidedly the best mode of dressing. For this purpose angular splints made of tin, gutta percha, or pasteboard, are commonly used, and all require some little time for their construction. The plaster of Paris splint can be made in five minutes, and will fit itself to the inequalities of the arm more accurately than any other.

Fracture at Base of the Condyles.—Christina Chapman, æt. 4 years, admitted Sept. 5, 1861 (Dr. Parker), fell from a stoop, and sustained a fracture of the humerus at the base of the condyles. The deformity was the projecting backwards of the lower end of the upper fragment, resembling a dislocation backwards of the radius and ulna; crepitus distinct. The fracture was reduced, and limb laid on a pillow, and cooling applications applied. On the seventh day, the swelling having subsided, the arm was put up in a plaster of Paris splint, in a position a little more than a right angle, the splint reaching from the shoulder to the hand, and more than half way round the arm. This was firmly applied with a roller—limb held in position until the plaster "set," and on hardening, formed a perfect elbow splint, keeping the fractured ends in perfect apposition. This was removed on the third week, and an examination made, which showed that union was firm. Passive motion was then commenced, and continued daily, the limb being replaced in the same splint. In a short time she entirely regained the use of the joint.

Although we have had no opportunity of witnessing its application in cases of *club foot*, we may venture an opinion that no better shoe could be constructed, and none which would fulfil more indications after tenotomy has been performed, than by these accurate mouldings to the limb. During and for a while after the application of this dressing, due attention should be paid to adjustment of the foot. The gutta percha shoe, which is more troublesome to make, and certainly in many respects not as good, might thus be dispensed with.

Without seeking to lay any undue stress upon the value of this mode of dressing, in which we think we have been borne out by the successful issue of the cases above detailed, we still think ourselves justified in recommending it in all instances where despatch is an object worth striving after.

Many valuable lives, perhaps, might be saved, and much suffering certainly alleviated upon the battle-field, by a resort to this expedient. No great amount of surgical skill is requisite for its use, and not much room need be taken up in the packing away of the plaster in its dry state, proper care, of course, being taken to prevent the contact of moisture. Again the art of its application, if such we may style it, can be very readily communicated to any of ordinary intelligence, such, for instance, as those presumed to compose an ambulance corps. Patients with limbs dressed in this manner might be transported comfortably.

In conclusion, we would disclaim any originality in our views, having first received hints upon the subject from a description of M. Maisonneuve's method, as set forth in the letters of Dr. D. P. Smith to the *American Medical Times*. There may be certain modifications in the application of the plaster, but to this distinguished French surgeon belongs the credit of reviving its use and urging its adoption upon the profession.

HERNIA.

CAUSES OF ITS FREQUENCY—MEANS OF PREVENTION—POLICY AS REGARDS ITS TREATMENT.

By J. W. RIGGS, M.D.

In a report submitted to the American Medical Association a few years since, by a committee of distinguished surgeons chosen by the Association to investigate the subject of hernia, the following language occurs:—"Either there is some inherent difficulty in the way of the radical cure of hernia, or the proper method has not yet been discovered." These views seem to have met with the concurrence of the medical profession very generally, and are believed to be in accordance with the prevailing sentiment of the present day; and even had this report been made still more humiliating by stating that hernia is not only irremedial, but is usually aggravated by the means ordinarily employed, such statement would have been amply sustained by the testimony of at least a large majority of all who have had adequate experience with trusses.

If the observations and researches of a Hayward, a Warren, and a Parkman, lead to such conclusions—and if, moreover, it be demonstrable that the usual treatment of hernia is oftener injurious than otherwise—it will not be deemed too soon to invite further attention to the disease and its treatment, with the hope of attaining ultimately to better results.

Indeed, had physicians given this subject more attention at a much earlier day, it is not to be doubted that, as a rich reward for their labors, a vast amount of suffering would have been avoided, and many valuable lives saved to the world.

In an article on congenital hernia, which appeared in this journal in April last, the reader may have noticed the remark, that this disease (occurring in infancy), unless speedily cured, is believed to predispose its victim ever after to a return of the malady; and, moreover, that when consecutive ruptures (or relapses) do occur, they always differ essentially from primary herniæ, and cannot be treated with that reasonable hope of success which may always be entertained when the disease has not previously existed in the same individual.

If the arguments advanced in support of this position are valid, the inference is, that a very large proportion of the ruptures now existing in the adult population of the world, with its concomitant suffering and death, may be traced to a mistaken policy as regards its management during infancy and childhood. An exact estimate of the proportions cannot be given, but to say that one half the ruptures now existing in adults will be found in those who had had the disease early in life, would be far from an exaggeration; and hence it follows, according to the theory advanced, that by proper treatment at the proper time, an untold and inconceivable amount of suffering and of death from this disease would have been averted.

"Just as the twig is bent the tree's inclined," is not less true of animal than it is of vegetable growths; and if the inguinal canal be dragged down, overstretched, and distorted by the intruding bowel for months and years during the tender periods of infancy and childhood, no human agency can restore this passage to its normal condition, nor even to such an approximation towards its natural state as to afford exemption or scarcely the hope of escape, from a return of the disease at some future day.

Nor is it at all strange that the application of trusses, especially to young subjects, is so utterly barren of good results and oftentimes hurtful, for, as is well known, these instruments are employed usually without discrimination—without any adequate knowledge of the laws of cure or of the indications to be fulfilled, and without the slightest regard to fitness in any respects, either as to the principle or construction of the instruments, the amount of pressure to be exerted, or the situation it should occupy in order to support and maintain the obliquity of the canal. So also is it abundantly manifest that the unsatisfactory treatment of the disease in adults is mainly attributable to the various causes above mentioned.

Though the mere existence of hernia, whether in the child or the adult, does not necessarily involve the same amount of physical suffering that is sometimes experienced in other cases, yet there are few diseases more dependent upon the intelligent use of suitable means for their successful treatment, or of more importance than that under consideration.

The Indications.—Prominent, and among the first of these, is to prevent the escape of the viscera. And it may here be remarked, that this important requirement is rarely fulfilled by trusses; either the construction or application of the instrument being such as to render its accomplishment in a satisfactory manner entirely impracticable. Though the bowel may for the most part be retained within the abdominal ring (?), it usually occupies the internal aperture and upper portion of the canal, and escapes at its outlet immediately on the removal of the truss, as well as too frequently, also, with the instrument in its accustomed position. As was stated on a former occasion, *the bowel cannot be effectually retained by the ordinary convex pad of the usual size when properly placed above the pubes*, for when thus situated, as it always should be, and as, in order to afford any reasonable hope of permanent benefit, it must necessarily be, the greatest care seldom suffices to prevent its escape.

It is not only necessary that the protrusion of the viscus at the external ring be carefully guarded against *at all times*, but to afford any reasonable hope of cure the passage must be kept so closed *throughout its course* as not to admit the intestine at the internal ring. Nor is the mere closure, or obstruction of the canal, however perfectly accomplished, all that is required. There is a right and a wrong way of effecting this object—a method which never fails of good results, and other plans which, on the other hand, very seldom fail of disastrous consequences to the patient.

If there are physicians who, from inattention to the subject, are unaware of the fact, there are comparatively few among the victims of hernia who have not learned by a sad experience that usually, with the increased duration of the disease, there is a corresponding augmentation of suffering, and this is believed to be too often only the legitimate effects of treatment.

Besides the absorption of tissue, impingement of the spermatic vessels, and enlargement of the apertures, incident to the ordinary convex truss pad, this form of the instrument, when in its proper position, favors the escape of the bowel, as stated, more than any other that could be devised. Not only is this shape objectionable for the reasons mentioned, but its liability to displacement with the constant shifting of the integuments, to which alone it attaches itself, contributes largely to its inefficiency.

It is true, this pad may be made so conical or so pointed as to bury itself to a considerable extent in the subjacent muscular tissues and thus maintain its position. But it must be borne in mind, that besides the discomforts thus occasioned, the nicest discrimination as to the amount of pressure and position of the instrument rarely prevents undue stretching and enlargement of the hernial apertures. Especially are these evils to be dreaded (if they are not inevitable), unless the abdominal walls are well developed and unyielding to pressure.

Dr. Valentine Mott called attention many years since, to some of the foregoing evils resulting from trusses, and urged upon the late Dr. Hull, whose truss was the most extensively employed, the importance of changing his instrument from its then convex, to its present concave form. In his notes to "Cooper's Dictionary," the late Dr. Reese also advocates this principle. And if proof were wanting of the wisdom and far-seeing sagacity which first suggested this improvement, a comparison of the results of treatment by this, with those by the ordinary convex truss, will abundantly suffice by showing unmistakably, that a vast amount of evil has been averted by this change.

(It is deemed proper here to allude briefly to the multipedal or knobbed truss pad. This instrument, suitably adjusted, exerts lateral pressure upon either side of both the external and internal openings, thus approximating the walls of the passage without obstructing the circulation in the cord, and in such manner as to force the intestine into its position within the body, where it may and always should be maintained. It will be observed that in this case, the force of the spring, instead of being exerted at a single point, is distributed equally upon separate bearings, thus making the instrument not only comfortable to the wearer, but also immovable by the various motions of the body—whilst, also, the evils above mentioned are effectually obviated, and every indication of treatment fulfilled as perfectly, it is believed, as is practicable by any mechanical contrivance.)

Pressure by the Truss.—Though remarked on a former occasion, it will well bear repetition here—*that the importance of a just discrimination as regards the force exerted by truss springs cannot be over-estimated.* Much of the irreparable injury by trusses as may be due to other causes, nothing is so prolific of mischief in most cases as the long continued application of undue force by a convex or conical pad.

The impossibility of graduating the force of a tempered steel spring, and of adjusting it nicely to the form of the body, has been a great obstacle to the proper adaptation of trusses, and thus more or less productive of evil. The hard rubber, as now applied to truss springs, effectually overcomes these difficulties. Simply by immersing the spring for a moment in boiling water, and thus heating the rubber to prevent its fracture during the necessary manipulations, it may be moulded to any desired form, and the pressure be increased or diminished with the utmost exactness, without in the least impairing its suppleness or elasticity. Whilst, moreover, the perfect insulation of the steel by this inimitable material excludes all moisture, and renders the instrument perpetually cleanly and durable.

The instrument itself being properly constructed and so adjusted as to afford adequate support to the passage throughout its course—and without injury to the patient—it becomes necessary and indispensable to success that the efficiency of the truss be carefully maintained. It were needless to repeat that the greatest precaution should be observed to guard against protrusion of the bowel *at all times.* Not only should the passage be closed against the intestine, but the sac itself should be entirely excluded from the inguinal canal.

Another and by no means less important prerequisite to success in this disease, is *its supervision by the medical attendant.* At least the occasional attention of the surgeon is demanded as much in this as in any case of mechanical surgery. However philosophical the instrument employed, and however perfect its adaptation to the case when first applied, instances seldom or never occur in which as regards its practical working it is not sooner or later found susceptible of improvement. The most limited experience with trusses could hardly fail to demonstrate this fact, by showing, for instance, that the force which is only adequate to the perfect retention of the bowel at first, might, by too long continuance, especially with the convex pad, prove disastrous by such extensive absorption and attenuation of the parts as to render enlargement of the hernial apertures inevitable. It is found necessary also in most cases to modify the form or the size, or perhaps change the position of the rupture pad during treatment, not only to avoid any threatened evil, but to maintain and if possible enhance the curative tendencies of the instrument.

There are many reasons in favor of the policy here advocated, which on due reflection will suggest themselves to the mind of every professional reader, and which would seem to be conclusive on this point.

In fractures, as well as all other surgical cases, the attentions of the surgeon are very properly deemed indispensable until a well established convalescence renders them no longer necessary. So fixed and so inexorable in its demands has this rule become, that in view of the fearful responsibilities justly devolving upon him, and of the consequences to his patient (and perhaps to himself) of any flagrant or habitual neglect, the practitioner very rarely fails to make available all the means at his command for the proper fulfilment of at least some of the more prominent indications of treatment; and until like rules obtain for the management of this disease, all experience of the past demonstrates too clearly that little else than failure and disaster are to be hoped for in the future.

It will scarcely be urged that the interests at stake are not of sufficient magnitude to demand the physician's care and attention—for these, whether sanitary, pecuniary, or social, when viewed in the aggregate, are believed to be vastly greater than are involved in any other disease.

Neither will it be said in vindication of the let-alone policy hitherto observed by the profession, that owing to a want of the necessary appliances for every emergency, physicians cannot treat hernia satisfactorily. With equal plausibility and like force it might be urged in case of a fractured bone for instance, or of a severe injury demanding amputation, that in the former the patient must be maimed for life, and in the latter die a premature death, because forsooth his medical adviser or surgeon had not the means necessary for his deliverance.

It may be observed, moreover, that in every department of the healing art there is an important though latent element largely available in the treatment of disease, and which, in hernia especially, finds unlimited scope for the display of its magical potency; and this can be recognised and duly appreciated only by the medical practitioner. It is that conservatism which happily is so rapidly gaining favor, and may well be said to characterize and not less to distinguish and adorn the professional career of every true physician.

It is well known, for example, that in very many families the openings through which the bowels usually escape in hernia are preternaturally large: and that in all these there may be said to exist a positive predisposition to the disease. So true is this doctrine of the transmissibility of disease, as regards this infirmity, that instances are comparatively rare where the children of ruptured parents escape a like infliction. Knowing this fact then, which all alike do know—and with daily and hourly opportunities, such as all practitioners enjoy, whether it be regarded as an imperative duty or not—the physician would hardly transcend the functions of his heaven-born mission, under such circumstances, simply to impart to parents this knowledge of impending danger to their offspring, and thus arouse a sleepless vigilance which would at least lead to the early discovery of the disease, with such appropriate treatment as could not fail to divest this relentless, life-long malady, of all its terrors, and in a large majority of instances result in its perfect cure.

Nor is the value of such supervisory care of the surgeon to be estimated alone by the benefits which would always result from the judicious treatment of this disease on its first development. If it be true, as doubtless it is, that usually months and not unfrequently years elapse between the time of the entrance of the viscera at the internal ring and their escape at the outlet of the canal, it must be admitted that with the slightest knowledge of the nature of hernia, and of its causes and premonitory symptoms, the infirmity would often be discovered even before the bowel had emerged from beneath the external ring; and that suitable means thus early employed would effectually oppose its further descent, and ultimately accomplish a radical cure of the disease, will scarcely admit of a doubt.

But arguments in support of a proposition so self-evident as that *hernia, like all other diseases, demands the care of physicians*, need not be multiplied. The dark and unsatisfying retrospect of the disease testifies too clearly of the worse than negative results of treatment (if such it may be termed) in the past, and to any objections that may be urged against a policy so obviously just, as well as to every argument that might be offered, either in explanation or justification of the entire neglect by the profession of sanitary interests so vast—let the fitting response be heard in the urgent, ceaseless, and hitherto unavailing appeals for deliverance, from the numberless victims of this disease, and in the heart-rending cries of those called daily in different parts of our land, to mourn the sudden and untimely (if not needless) death of some friend, the early victim to strangulated hernia.

The profession are not expected to accept, as established facts, any mere opinions or unsupported theories, however plausible they may appear; and if in this is only manifested that prudent and commendable caution which is justly demanded in the investigation of disease and its treatment, neither, on the other hand, is there shown any special exuberance of philanthropy, nor undue zeal in a noble cause, nor yet any excess of duty even by the most critical examination of all theories that impose the slightest claim to consideration.

Though the past, as stated, has signally failed to point out the method by which hernia may be successfully treated, it has nevertheless clearly revealed the significant, though apparently unheeded and as yet profitless truth, that from a like policy in the future like results only may reasonably be looked for. This may well be regarded as an important revelation, for upon its acceptance or rejection, and corresponding action by physicians, is believed very largely to depend the preservation on the one hand, or the sacrifice on the other hand, of the comfort and happiness and the varied interests as well as lives of unnumbered thousands.

It is barely possible, perhaps, that under the most enlightened and salutary *régime*, and with the most ingenious and philosophical appliances for the purpose, hernia could not be treated with that uniform success that attends suitable treatment in most other surgical diseases. Such, at all events, appears to be the opinion of the profession everywhere, and if past experience may be relied upon for the purpose, its verification is indeed most ample. It will be borne in mind, however, that, even in medicine, error has been known to exist and for a long time to prevail over less apparent truth; and it is, therefore, an undoubted right to question whether the prevalent opinion that hernia is irremediable, may not after all be considered a *theory* wholly unsupported by facts, rather than an unalterable decree. Whether so or not, there are those who will thus regard it until at least some more rational method of treating the disease than that hitherto usually practised shall have been fairly tested and found unavailing.

The treatment of this disease for years past, in accordance as nearly as was practicable with the views here advocated, and with not very limited opportunities for observation, forces upon the mind these convictions—

1. That hernia, even as it now exists, with all the disadvantages resulting from the want of proper management, may in most instances be materially benefited and oftentimes cured by judicious treatment.

2. That in children, and young subjects, such treatment, from its early stages, would almost invariably cure the disease; and instead of having, in consequence of its previous existence, incurred the certain liability to its recurrence in after life, such persons would be even less exposed than many who had not had the disease, nor used a suitable and well adjusted instrument for support and protection early in life.

3. That this disease (both femoral and inguinal hernia) in adults, as well as in children, would generally be cured by proper treatment; and when not cured, would be so far remedied as to be free from suffering and from danger to the life of its victim. And whether to secure these results, and in time well-nigh exterminate the disease by the adoption of such policy as obtains in all other diseases, or (as heretofore) to leave it entirely to chance, and to be found in almost every family, is believed to depend wholly upon the medical profession to decide.

2 Barclay Street.

Reports of Hospitals.

NEW YORK HOSPITAL.

THREE CASES OF PRIMARY AMPUTATION.

Concerning the good results which respectively attend primary and secondary amputations, there has been a considerable difference of opinion, the reasons for which can be explained in a variety of ways. The military surgeon is proverbially more successful with his primary amputations than he who is engaged in civil practice. This, according to Ballingall, is accounted for in a great measure by the moral influences which relatively affect the two classes of patients. The wounded soldier loses his limb in a good cause, under circumstances which are highly creditable to himself, and for the sacrifice he is sure of a pension for life; his mind is comparatively easy. How different is the mental condition of the mechanic or the tradesman, who with perhaps an indifferent constitution, and a family dependent upon his exertions, is admitted with an injury requiring amputation, by which operation he finds himself suddenly deprived of his former means of subsistence. Another condition must be taken into account in this connexion, and that has reference to the physical change which each experiences in his new situation. The soldier, removed from the crowded camp or barrack-room to a well ventilated hospital, has an immense advantage, in being thus confined, over the out-door artisan who, save at night, is always in the open air. Then again, a great many operations have been performed upon the battle-field, which, were the surrounding circumstances different, the cases would have probably recovered without the use of the knife.

Viewing the other side of the question, a great many deaths occurring between the first and twentieth days have been charged to secondary amputation, to which, however, in truth they did not belong. Operations occurring thus in the intermediate period, are necessarily desperate as regards the promise of any good result, from the fact that they are performed at the most unfavorable period, and have for their purpose, not only the salvation of the limb, but of the very life of the patient. It is in consequence of the unfavorable results in such cases that Mr. Alcock, in common with the majority of surgeons, has advised primary amputation in all cases where there are serious doubts concerning the preservation of the limb. "Add," he remarks, "all these deaths (from *intermediary* amputation) to those from secondary amputation (properly so called), and he must be a bigot indeed to the adverse opinion who can have one moment's hesitation as to which side of the question the amount of human suffering and the loss of life preponderate."

Aside from the general considerations which, all other things being equal, should urge the performance of primary amputations, statistics are decidedly in favor of the operation. The practice of the New York Hospital differs in no respect from that generally followed by other similar institutions.

The three following cases, communicated by Dr. D. B. St. John Roosa, Resident Surgeon of the Second Division, may serve as types of a class for which primary amputation is unhesitatingly performed.

Case I.—*Compound Fracture of Radius—Gunshot Wound.*—Henry M., æt. 18, N. Y., printer, was admitted Aug. 20, 1861 (Dr. Buck, Attending Surgeon), at half past one P.M. A few hours previous, while getting over a fence, holding a shot-gun in his left hand, the muzzle resting against the palm, the trigger was caught, the gun discharged, and the contents lodged in hand and forearm. Patient was found somewhat agitated and anxious, very slight shock; pulse a little frequent, but of good force. The left arm was enveloped in bandages, on removing which the following appearances were presented:—There was a lacerated wound about one inch long, blackened with powder, situated at the base of the thenar eminence, the hole of entrance; and on the dorsal aspect of forearm, a lacerated wound, about the size of a three-cent-piece, the point of exit, through which shreds of wadding protruded. Patient was etherized, and a digital examination disclosed a compound comminuted fracture of the radius about three inches above the joint. Ulna intact, also radial and ulnar arteries. There was also situated just over the elbow a burn of a considerable degree of intensity, caused by the sleeve catching fire at the time of the accident.

In about one hour after admission, the forearm was removed at a point above the junction of the middle with the lower third by the circular operation. After the ligature of the bleeding points, the lips of the wound were united by interrupted silk sutures, and a wet bandage applied from above downwards. The patient passed a quiet night. The following day he had some slight fever, which was soon relieved by a purge. The stump looked remarkably well, and irrigation by means of a lamp-wick syphon was commenced. The second day after the operation the bandage was removed, when no tension of the stump was visible, neither was there any undue inflammatory redness present. The intermediate sutures were then removed, and the wet bandage reapplied. The irrigation, causing pain, was discontinued. On the 23d, the remaining sutures were removed, when there was a slight amount of suppuration at the edges of the wound. From this time the parts granulated nicely, and everything progressed favorably. The ulcer of the burn was dressed with simple cerate. On the 10th of October, he was discharged cured.

Case II.—*Compound Fracture at Elbow-joint—Railroad Injury.*—J. C. D., policeman, aged 31, was admitted Sept. 4, 1861, during the service of Dr. Halsted, at 5¼ P.M. Three quarters of an hour prior to admission, while standing on a platform of a railroad car in motion, he attempted to jump off, and fell under the car; one wheel, revolving slowly, passed over his left arm. He immediately arose and walked to a carriage, wrapping his coat sleeve tightly around the limb. On admission, patient was calm and collected; pulse of good force. There being considerable hemorrhage from the arm near the elbow-joint, a tourniquet was applied over the brachial artery. On examination of the injury, there was found to be a compound comminuted fracture at the elbow-joint, with tearing up of integuments and laceration of muscles, to a point about three inches below shoulder-joint; the olecranon chipped off, lower extremity of os brachii comminuted, radius was protruding, and the ulna was shattered throughout the upper third of its extent. In one hour Dr. Halsted had arrived. Meanwhile patient was stimulated with brandy and strong infusion of green tea. Patient was etherized, and the arm removed, by Alanson's method, at a point a little above the junction of upper with middle third. Ten ligatures were applied; stump was left open, supported on a pillow, and water dressings applied. Patient recovered slowly from anæsthesia; took ten drops of liq. opii comp., and during night hypodermic injection of ten drops of Mag. sol. morph. Sept. 5th.—Was mildly delirious, owing doubtless to the fact of his having been a free liver for the last ten years. Stump was closed with silk sutures; water dressings continued; pulse 120; beef tea, in suitable quantities, ordered. 6th.—Slept only tolerably, with aid of sixty drops liq. opii, in two doses. Delirium continues; stump looking well; took beef tea, as before, and four oz. brandy per diem, and, besides, the following: ℞ Camph., gr. ss.; pulv. Doveri, gr. v.; M. ft. chart. No. xvi. Cap. 1, q. 3 h. On the 7th, the second day after the operation, delirium subsided, and there being some tension of stump, the sutures were removed, and the edges of the wound brought together by adhesive plaster; the water dressings were continued. The stump commenced suppurating on the 9th, at the same time forming around the edges of the wound a greyish slough. Dressed with yeast poultice; pulse 98, and weak. Ordered eight oz. brandy, one bottle porter per diem, and beef tea *ad libitum.* 10th.—Was again so violently delirious last night that confinement of limbs was rendered necessary. Hypodermic injection of ten drops Mag. sol. morph. again given. Stump suppurating moderately; dressed with adhesive plaster and bandages. 12th.—Delirium continues, although he has sane intervals. Stump doing well; continue brandy and porter, with one gr. camphor, one gr. opium in a pill, every hour, until sleep is secured. Pulse 96, and weak; surface pleasant, tongue dry. 14th.—Delirium continues, though at longer intervals; worse at night. Continue camphor and opium according to circumstances. 16th.—Patient had a good night's sleep, and anodynes were accordingly diminished to fifteen drops Mag. sol. at night. Stump was doing well, and presented the aspect of healthy ulcer. Dressed with ung. and bal. Peru, and strapped. Patient continued to do well until Oct. 10th, except when a small abscess formed in stump. This, however, was of short duration; and on the 9th of November he was discharged cured, the surface of the stump having entirely healed.

Case III.—*Compound Fracture of Knee-joint—Railroad Injury—Amputation of Thigh.*—Henry Maynard, aged 16, native of N. Y., telegraph operator, was admitted during the service of Dr. Buck, at 10 o'clock, the night of Sept. 26, 1861, having, five hours previously, sustained a compound fracture of the thigh in the following manner:—While attempting to pass from one car to another, while the train was in motion, he slipped and fell, the hind wheel of the car passing across the lower part of the right thigh, close to the knee-joint. The wound thereby caused was six inches in length, extending from a point about three inches above the external condyle of the right femur, obliquely upwards and backwards, disclosing the existence of a comminuted fracture of the lower end of the bone communicating with the joint. The surrounding soft parts were very much contused and lacerated. At the time of admission, patient not suffering much from shock, the pulse being 90, and rather weak.

Dr. Buck was immediately sent for, and arriving at 1 A.M., decided upon the necessity of an amputation, and, as the patient was in a good condition, resolved to perform the operation at once. Ether was administered, and the thigh was amputated at the junction of the middle and upper thirds; the double-flap operation being practised. The hemorrhage was quite considerable, requiring the use of a number of ligatures. The flaps were brought together and kept in position by three acupressure needles, while the edges were approximated by sutures and plaster. Cold water dressings were then applied. During the operation, patient's pulse fell off somewhat, requiring the free use of brandy.

The day following the operation, the patient became quite delirious, and continued in that condition for three days. The stump, during this time, appeared quite tense, requiring the employment of irrigation. On the 29th, the two lower sutures were removed, and also one acupressure needle, which allowed the stump to discharge freely. On the 20th of October, all the remaining sutures and the needles were removed. The stump became very tender to the touch, and poultices were applied with a view of favoring suppuration and healing by second intention. The favorable progress of the case was interrupted by the appearance of bed sores on each side of the coccyx, which continued to claim attention for a fortnight or more, requiring the pretty free use of stimulants and nourishing diet to keep up the strength of the patient. At the end of that time, the stump took on a healthy reparative action, and the recovery was comparatively rapid.

The use of the infusion of green tea in the second case was, according to the statement of Dr. Roosa, attended with the best of results. The well known properties of this article would seem to indicate *à priori*, its special use in all cases attended with prostration of the nervous forces.

The general dressings of stumps, whether the operation be primary or secondary, are, for the most part, such as tend directly to the prevention of inflammation; for example, the application of the wet bandage and the use of irrigation. Very little attempt is made by the surgeons to secure union throughout the wound by first intention, the only desire being, by the use of sutures, adhesive plaster, and the like, to so approximate the cut surfaces as to lessen the space to be subsequently healed by granulation.

Reports of Societies.

OBSTETRICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meetings, *June and October*, 1861.

ALFRED UNDERHILL, M.D., Chairman.

[Reported by M. G. PORTER, M.D., Secretary.]

DISCUSSION ON SCARLATINA (*continued*).

(*Continued from page* 358.)

DR. BULKLEY confirmed the statement that mild cases are oftener succeeded by sequelæ. He invariably used warm baths as a protective against anasarca, and rarely saw it in his own practice. Among his remedies for anasarca were mustard and fomentations to the back for days successively, the vapor bath, etc. Mentioned slacking lime in a wet cloth as a convenient method of procuring the vapor bath.

DR. PORTER mentioned several malignant and fatal cases of scarlatina, which had come under his care during the past year, one dying in a convulsion within two hours of its seizure, and two others within two or three days. These were directly traceable to a fatal case which had occurred in the same house about a month previous. Several other children in the family, though constantly exposed, did not contract the disease. No means of prevention were used. Dr. P. also narrated a recent case of sudden death in the course of anasarca following scarlatina. The patient was a lad five years of age. The lower extremities and scrotum had been enormously swollen, but for two or three days preceding death, marked amendment had taken place, under the use of free doses of iodide of potash, and hopes of recovery had begun to be entertained, when sudden effusion probably occurred into the pericardium (manifested by a feeble and intermittent pulse), and the little fellow dropped off instantly while sitting up, talking cheerfully with the other children. A sister of this patient died a few days before from cerebral effusion as a sequel, and both had been mild cases of scarlatina.

Dr. P. confirmed the statements in regard to the frequent occurrence of deafness after scarlatina, and read the following paragraphs from a Report of the New York Institution for the Deaf and Dumb for 1853, relating to this subject. After enumerating the diseases which have produced deafness, the writer says—

"Of the named diseases in our table, scarlet fever is by far the most frequent. One fifth of all the cases in our table are ascribed to that epidemic; and, as we shall hereafter show, a much larger proportion of the more recent cases. This disease and measles produce deafness by a continuation of the inflammation in the throat and fauces, into the ear through the Eustachian tubes. In some cases of deafness, caused by scarlet fever, suppuration takes place within the ear, the membrane separating the tympanum from the external passage is destroyed, and the small bones of the ear come away. After the infirmity is once established, there is seldom any rational hope of cure."

"A comparison of the European table of causes of deafness with that of America, shows that scarlatina is not as common a cause of deafness abroad as on this side of the Atlantic: there being only 128 out of 1,630 European cases assigned to it, or one in thirteen, whereas in the United States it is the cause in one case in five."

"We thus find that of the pupils admitted in the American schools before 1840, less than one in forty were deaf by scarlet fever; and of those admitted since 1840, more than one in eight lost their hearing by this disease. Compared with the whole number of cases of acquired deafness, those by scarlatina were one in seventeen before 1840, and not much less than one in three since 1840; or taking the western schools separately, we find, since 1840, 186 cases of scarlet fever out of 534, more than one third, in the former, and 76 out of 348, more than one fifth, in the latter.

"As a providential compensation for the increased activity of this epidemic, in destroying the sense most important to the intellectual and spiritual nature of man, it may be some consolation to anxious parents to reflect that there are of late, proportionally, fewer cases of the loss of hearing by other diseases than formerly.

"We have applied to some of the most eminent medical men of New York, for an explanation of the striking increase in the number of cases of scarlatina deafness since 1830. The answers of three of them, Prof. Joseph M. Smith, Prof. A. Clark, and Dr. A. C. Post, furnished statistical details that showed that, while this disease was rarely met with in this country, at least under a severe form after 1804 and before 1829, since that year it has assumed an epidemic form, and become one of the most fatal diseases of children. According to a table prepared by Prof. Smith, from the New York bills of mortality, the deaths by scarlatina in that city, during twenty-four years, from 1805 to 1828 inclusive, were only 97. In 1829, there were 188 deaths by that disease, and from that year to 1850, both inclusive, the total of deaths by scarlatina was 5,290.* During that period the proportion of deaths by this disease to the whole mortality, was more than one in forty; from 1829 to 1844, more than one in thirty. In Philadelphia, also, similar results are shown. There, the whole mortality from this disease, from 1815 to 1829, inclusive, was 92. In 1830 there were 40 deaths by this disease; in 1831, 200; from 1831 to 1846 inclusive, 3,391. 'A sudden and striking instance of mortality from scarlet fever, occurred in Boston about the same time as in New York and Philadelphia;' and as the pupils embraced in our tables come from every part of the northern States, we cannot doubt that there has been a similar increase in the prevalence of this epidemic, at least over the northern half of the Union.

"Though this fact alone seems abundantly sufficient to explain the increase of cases of scarlatina deafness, other reasons are suggested by Dr. Metcalfe, Professor Clark, and Dr. Reese. The first thinks that the type of scarlatina now prevailing, has a greater tendency than formerly to inflammation and ulceration of the throat and fauces, and thence into the ears ;* the last suggests that the prevailing medical treatment of the disease is in fault. How far this last reason may be applicable, must be somewhat difficult to decide, when we reflect how small a proportion the cases of deafness caused by scarlatina, bear to the number of deaths by that disease.

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* Since writing the foregoing, we have been indebted to Dr. A. Clark, of the College of Physicians and Surgeons, for a table, by which it appears that the deaths in this city, from scarlatina, from 1805 to 1828, 24 years, were 97, an annual average of 4; and from 1829 to 1852, also 24 years, they amounted to 6,720, an annual average of 280.

"In New Jersey, in 1853, out of 5,615 deaths reported, 240 were by scarlatina. In Maryland, by the census of 1850, the deaths by this disease were 355, out of 6,984. Summing the two States together, we have 595 deaths by scarlatina, approaching the ratio of one in twenty of the whole mortality, and about one to forty births. We may, therefore, assume that in the middle States, one child on an average dies by scarlet fever, during the present epidemic cycle, out of every forty births.

"For several years past, the average of admissions of children deaf by scarlatina in the three north-eastern institutions, has been nearly twenty. The number of births in the New England and Middle States, judging by the numbers returned from New Jersey and Maryland, cannot be less than 240.000 annually. It appears, then, that only about one child in twelve thousand becomes deaf by scarlet fever, while one in forty dies of that disease. In other words, *the chances to every child of loss of life by scarlatina, are three hundred times as great as the chances of the loss of hearing.* It is evident from this statement, that a physician may attend several thousand cases of this disease, and witness several hundred deaths by it, without being able to decide positively, from his own experience, that one mode of treatment is more effectual than another, in preventing the distressing, but comparatively rare consequence of deafness.

"Dr. Smith thinks that the scarlatina epidemic which has prevailed in the United States for the last quarter of a century, has begun to abate; and that, at no remote period, this disease will appear as rarely in our bills of mortality as it did before 1829. Whether other diseases, now infrequent or unknown, will prevail as causes of the deafness, as well as death of children, as the scarlet fever ceases to prevail, is a question in the hands of Providence. The afflictions of the children of men may diminish, as the laws of life and health become better understood and obeyed; but the past history of our race affords no warrant for believing that they will wholly disappear, till some great change shall be wrought in the constitution of our planet and of its inhabitants.

"A glance at Table IX. will show that in Leipsic, Dresden, and Altenburg (or in other words, in Saxony and the adjoining Duchy of Saxe-Altenburg), scarlet fever is, or was a few years since, as prevalent as a cause of deafness, as it is in the United States. On the other hand, in Italy, France, Belgium, and Rhenish Prussia (Cologne), it seems as rare as it was in this country before 1830.

Amount of Army Rations per Month.—The following figures show the amount of commissary stores which will be consumed in one month by the United States army when brought up to the standard authorized by Congress, viz. 500,000 men. It will be seen that the labors of the commissary department are anything but trivial, and that the cost of feeding an army is a somewhat serious item. 11,250,000 pounds of pork, or 18,750,000 pounds of fresh beef; 105,380 barrels of flour; 37,500 bushels of beans, or 1,500,000 pounds of rice; 1,500,000 pounds of coffee; 2,250,000 pounds of sugar; 150,000 gallons of vinegar; 225,000 pounds of candles; 600,000 pounds of soap; 6,384 bushels of salt, and 6,600,000 pounds of potatoes.

American Medical Times.

SATURDAY, DECEMBER 7, 1861.

THE AGE OF UTERINE DISEASE.

It has been remarked by a popular writer that this is "the age of uterine disease." In the medical profession, and with the other sex, the assertion certainly is not wide of the truth. Uterine diseases have been the all-engrossing theme of a large class of practitioners for many years. Volumes have been written upon these affections, with chaste or unchaste illustrations of every grade, from the secret and undetermined forms of sterility, to the gravest forms of cancer; interminable discussions have been held upon the ever-varying phases of the diseases of this organ; and students of uterine pathology have always been rewarded with rich discoveries in this fecund placer. If we were to believe all that is written of the inherent and acquired diseases of the organ, on the integrity of which depends the perpetuation of our species, how surely fated to early extinction would seem the human race? If it be perpetuated, it would be through decaying germs that must give origin to imperfect forms and decrepid generations.

But while it is true that uterine diseases exist and form a large class of affections which are capable of destroying the health and happiness of the sex, can any observant practitioner doubt that the uterus is, in our time, the scapegoat of many a latent malady of the female that is not correctly diagnosticated? Said an eminent obstetrician of this city: "If I should confirm the diagnosis in every case that is sent to me from the country, as one of undoubted uterine disease, I could add thousands of dollars to my annual income." He was emphatic in the expression of his opinion, that medical men, nowadays, conveniently referred to the womb a vast number of affections of which they either had not the tact or knowledge to determine the seat and nature. He examined the consulting patient with an habitual anticipation of finding a normal condition. Such statements are startling, and indicate a vast amount of carelessness or ignorance, or both, in the medical profession. In general, no diseases are more readily susceptible of accurate diagnosis than those peculiar to the uterus. They belong, in fact, to the diseases distinguished by the French as External Pathology. If there is an ulcer on the parts it is seen as distinctly as if on the leg; if there is unnatural enlargement, it is as detectible as a swollen finger; if there is a tumor of any kind or description, it is as demonstrable as a similar growth on the face; if there is displacement in any direction, it is as apparent as a dislocated limb. Indeed, a physician, with all the mechanical aids which we now possess for investigating uterine diseases, cannot be held guiltless of culpable ignorance who pronounces falsely upon the presence of grave lesions. He has no excuse for diagnosticating an ulcer when there is none; or prolapsus, when the organ is in a normal position; or anteflexion or retroflexion, when neither exists. And yet these false opinions are, it must be admitted, daily given, greatly to the discredit of many a physician in the eyes of an honest and competent expert.

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* Dr. Clark seems to concur in this opinion: observing that "some of the older physicians inform me that the disease was marked by great fatality in the last years of the last century; and that during all the period distinguished for its low mortality, the affection still prevailed, but of so mild a type as to demand little attention from the physician."

We believe that these errors are generally the result of carelessness. There is in many, also, a disposition to give always a definite opinion, especially in an obscure case; and it is convenient to fix upon an organ which has the popular acknowledgment of being the happy abode of all the undiscovered maladies of the female organization. The uterus has now come to enjoy the relative position of the liver in its ability of concentrating within itself all the undefinable diseases to which the sex are subject. Although the term "liver complaint" has now become obsolete in the nomenclature of many practitioners, yet its place is more than supplied by the phrase "uterine disease."

Aside from the humiliation of professional character which results from such ignorance and carelessness, there are other evils of a very different kind that must not be overlooked. We have thereby opened a large and fertile field for the special advantage of quackery in its lowest and most revolting forms. It is not strange that the interesting and interested subjects of these affections have become alarmed at the almost universal prevalence of the belief in the disabilities peculiar to their unfortunate sex. Thousands of nervous ladies suffering from some slight and obscure derangements of digestion, or other departure from health, are secretly informed by friends that the womb, that mysterious organ, with its innumerable susceptibilities, is liable to an infinite number of strange disorders. At once a mania for an investigation seizes the individual victim, which nothing but the manipulations with the speculum can relieve. And alas! too often instead of relieving a proper apprehension on the part of the patient, even though she is correctly informed that the womb is not diseased, a new source of excitement is established which is far more dangerous to her happiness than actual disease. If her ailments are lightly treated by her medical attendant she readily falls into the hands of a vulgar irregular, and becomes the dupe of his villanous machinations. In more than one instance has the profession of this city witnessed a uterine furor, created by an unblushing quack, which neither reason nor modesty could control. And but recently we noticed an instance in which a most ignorant pretender opened a hospital for the treatment of uterine tumors, in one of the most intelligent and moral communities of an interior state; crowds of women flocked to him, and all were found to be suffering from tumors of the womb. By accident a patient more intelligent than others, discovered that the tumor was a piece of raw meat, which was introduced at the first examination, and which, after long treatment, was removed to the great relief of the patient.

It is time that uterine pathology was thoroughly understood by every practitioner. It is not, as we have already intimated, difficult to learn so thoroughly that mistakes in diagnosis will be only exceptions, and not, as now, the rule.

THE WEEK.

The annual meeting of the Association for the Relief of Widows and Orphans of Medical Men in this city, was held in the lecture-room of the Academy of Medicine, corner of Twenty-third street and Fourth avenue, on Wednesday afternoon, Dr. Anderson, President of the Society, in the chair, and Dr. J. W. G. Clements, Secretary. The meeting was for the election of officers, and resulted in the choice of the present incumbents. The Society has been in existence nearly twenty years, and, as will be seen by the subjoined statement, has accumulated a handsome property. The fund has been but lightly drawn upon as yet, there being only two annuitants. The roll of members includes all the more illustrious names of the profession:

> "President, James Anderson, M.D.; Vice-Presidents, G. P. Cammann, M.D., H. D. Bulkley, M.D., William Detmold, M.D.; Secretary, J. W. G. Clements, M.D.; Treasurer, Edward L. Beadle, M.D.; Managers, Jacob Harsen, Isaac E. Taylor, John R. Van Kleek, S. P. White, James R. Wood, J. O. Stone, and S. Conant Foster."

It has always been customary for the Association to have an annual dinner, but last year and this the festivities have been omitted, in consequence of the state of the country. The Secretary presented the following annual statement of the condition of the Society:—

> "All the funds of the Society, as shown by the last Annual Report, in September, 1861, were invested. They amounted to $31,500, bearing interest at seven per cent., leaving a balance due the Treasurer of $26 11. The receipts for the year ending September, 1861, were $2,606 87; disbursed for same period, $341 53. The members of the Society now number one hundred and nine, of whom seventy-one are for life, and thirty-nine annual subscribers; besides, the benefactors number twenty-seven, of whom five are laymen. The Society extends its aid to the families of three of its deceased members. Applications for membership will be received at the general meeting in November. Annual members pay an initiation fee of $10, and $10 dues in semi-annual payments; or $100 paid at one time constitutes a member for life."

We would call attention to the paper on Plaster of Paris Splints, by Dr. Little, in another part of this number, as one of rare interest to the practical surgeon. The apparatus described is exceedingly simple, easy of application, and the results following its use, as illustrated in the cases detailed, are sufficiently good to recommend it as a valuable substitute for the ordinary splints. The advantages claimed for the new mode of treatment are considerable enough to invite a trial from all those who are in the habit of meeting with fractured bones.

We notice the discontinuance of the Berkshire Medical Journal, which has just completed a single year of publication by the issue of the November and December numbers under one cover. This journal has maintained a most creditable position in our current medical literature, and we announce its failure with much regret. To the editors, Professors Thayer and Stiles, the profession of Western Massachusetts, at least, are under great obligations for their effort to establish a medium of communication of the proceedings of their societies.

We have suggested the importance of a preliminary examination of medical students as to their educational qualifications for the study of medicine. This course is now the rule established in England. It is an interesting fact that the earlier medical men of this country endeavored to enforce similar provisions. In an interesting historical sketch of "The Medical Association of the County of Berkshire," Mass. (*Berkshire Medical Journal*), we find the following *Rule* was adopted as early as 1794:—"No member shall take a pupil and put him to the study of physic until he have a good knowledge of Mathematicks and the English language, and can construe and parse the Latin language with accuracy."

It is our melancholy duty to record the death of one of our most worthy city physicians, Richard S. Kissam, M.D. He died at his residence in Great Jones street, on Thursday, the 27th inst., of pneumonia, in the fifty-third year of his age. We shall present a more extended notice of the deceased in a future number.

In another column is a communication from a "Country Surgeon," urging the employment of surgeons by the managers of railroads. The subject is one of great importance to the welfare of the travelling public, and the arguments brought forward are perfectly conclusive. We trust this matter will not be allowed to rest here, but that the intelligent writer of that paper will take steps to unite the efforts of other physicians living on the line of railroads, to bring the subject before the Boards of Managers. The plan proposed must commend itself to every practical and humane mind.

How can the County Medical Societies be made more active? The following answer is given by the Berkshire (Mass.) *Medical Journal*, in a review of the Berkshire County Medical Society:—

"All experience tells us that Societies which meet monthly are much better attended than those which only assemble semi-annually or at longer intervals—the interest will not survive the long intermission. Another prominent cause of the increased success after the vote to have monthly meetings, is to be found in a proposition of Dr. Collins, which is in the record of the very next meeting, in the following words: 'Remarks from Dr. Collins relative to the manner of conducting our meetings; asking for more method, and suggesting that the President make an *individual* call upon the members to relate anything of interest which has occurred in the practice of each since the last meeting, and that ten minutes be allowed each member for such recital.' The proposition was adopted, and has since become the regular order of business, with the effect of bringing out much matter that would have been lost, as is always the case, from the diffidence of members and from want of system. The records, which formerly contained merely the votes of the Society—of censure on delinquents, the management of the finances, and tributes to the memory of the dead, have grown, since a regular order of business was adopted, more and more valuable in a scientific point of view."

Correspondence.

EMPLOYMENT OF SURGEONS TO RAILROADS.

[To the Editor of the American Medical Times.]

Sir:—Living in the vicinity of a great railroad, and having on several occasions been called to attend severe injuries occurring thereon, it has been a matter of wonder to me, that companies have never adopted, nor the public called for, more efficient arrangements for the saving of life in the casualties that every now and then happen. These are frequently of the most appalling character, and occur often in the most out-of-the-way places, so that before medical assistance can be obtained much time is necessarily lost. But ought we not to reduce it to a minimum? We know there is not a day that some terrible accident may not happen; that many die from shock and long exposure; and that the management of the injured, during the first few hours, often determines the question of life and death; yet, that no local arrangements are made to meet such emergencies. A man is hurt on the line, people run for the nearest doctor, who, when he arrives, is perhaps no surgeon, is scared at the aspect of the bleeding, mutilated object before him, or has no appliances suitable to the case, and the sufferer is bundled up in the best manner possible, put into a freight car, and sent to a hospital many miles away, there to die from the exhaustion of the journey superadded to the original shock; a valuable life, if only to his family, being thus perhaps unnecessarily lost.

I proceed to illustrate my subject by one or two actual cases. In October, 1857, a boy jumped out of the baggage car of an express train, at full speed, against the rocks in a cutting, and rebounding on the track was picked up horribly mangled. His injuries were as follows:—the left leg from midway below knee and foot completely smashed and in part torn away, fracture of the left thigh, compound fracture of right leg about midway below knee, both bones protruding, compound fracture of right great toe, and a severe scalp wound about three inches in length. He was quickly removed to his parents' residence and medical assistance was promptly at hand. I had the satisfaction of discharging him sound, of course with loss of one leg below the knee, after four months' attendance, for which I may observe *en passant* that, as in other minor cases, I received no compensation whatever. I do not think there can be a doubt that, had this boy been far from home, and been jolted along for many miles, however carefully, to a distant hospital, he would have been added to the list of railway victims, and his death regarded as a matter of course.

Some two years since, a train ran into another stationary on the line, injuring several persons, among them a lady, who was jammed in such a manner as to tear the abdomen. The shock to the system was very severe. After some delay, she was put into a car, although the accident happened near an important town, carried eight or nine miles, then from the station to a hotel, where within an hour or two she died. On the inquest, the medical attendant testified that she had not sustained any serious internal injury, and attributed her death mainly to the shock of the accident. In this case the shock to the system could hardly have been greater than in the preceding case, and the actual injuries were certainly far less severe. Now, had the sufferer been removed gently to the nearest town, or flag station, her wound dressed, and means promptly taken to allay her system, instead of time being lost, and carrying her about from place to place in her agony, a downward impetus being thereby given to already depressed and rapidly failing vital powers, might not the result have been different, and not only a valued life saved, but liability on the part of the company to the highest amount of individual damages avoided?

This is a matter in which not only the public and life insurance companies, but also the railroad companies themselves, apart from higher considerations, are interested even as a matter of economy. As regards the latter, are they not besides often mulcted in heavy damages for almost imaginary, or at least greatly overstated, injuries, for want of competent medical testimony on their side based on actual examination at the time of the accident? So much for the evil to be remedied. Now for the remedy itself.

Let the companies, where practicable, appoint district surgeons, unsalaried, but payable for actual services, at the principal towns along the line, and not exceeding from ten to fifteen miles apart, the district of each to extend to the flag station nearest to midway between any two. The advantage attending such regular appointments would be, that where medical assistance was not immediately at hand, the employees would know exactly where to send. At each such surgical station a small room should be set apart on the ground floor, furnished with an iron cot bedstead and bedding, a stretcher, a small table, one or two common chairs, and a small wood stove, by which the room could be heated in a few minutes if required in winter, or hot water, or a brick for application to the feet at any time. I may here observe, that if the companies did their part, I have no doubt each surgeon could raise, among his own friends and patients, enough not only to furnish the main station, but also to provide every flag station with a stretcher and mattress to be kept always ready, and of which the whole first cost would probably not exceed fifty dollars. The surgeon might also keep at the station a little linen, lint, bandages, sponges, a few splints, and such minor articles for immediate use. In case of an accident, a stretcher could be obtained from the nearest flag station, or those from the adjoining ones, if several were seriously hurt, and the medical officer summoned, also those of adjoining stations if necessary. This would not preclude, however, the employment of any medical assistant immediately available. If the injury were too severe to risk removal, the patient could be carried to the nearest flag station until the first danger had subsided; when practicable, however, he should be carried to the nearest district station, his immediate wants there attended to, and provision made for safe removal. When a surgeon is summoned to the scene of an accident he should have the right to avail himself of any passing train, that as little time as possible might be lost, and it should be his duty to examine carefully into the amount of injuries sustained, and to keep notes of the same for the future refreshment of his memory; also, to furnish a copy to the superintendent to be kept on file at the chief office. In cases of fraudulent or exaggerated claims upon companies, the medical officers would become their most important witnesses, and I believe the amount thus saved would far exceed all costs, and tend greatly to diminish litigation.

Among the advantages arising from the appointment of regular medical officers not the least would be, that many practical and intelligent minds would be devoted especially to the subject under consideration, and suggestions at once simple and valuable would gradually become embodied into rules and regulations for the guidance of employees in emergencies, tending materially to alleviate human suffering and save lives, which would no longer be allowed to ebb away on the hard floor of a baggage room amid a crowd of curious bystanders, nor would the usefulness of a medical man be crippled for want of the most necessary conveniences. In a word, system would take the place of chance arrangements with all their attendant confusion and increased risk.

With some such plan as that here crudely and briefly sketched out, how many lives, now annually sacrificed on the thousands of miles of railway, might be saved! A system would be by degrees introduced, simple in detail, inexpensive in its working, efficient in its results. The travelling public would find in it an additional guarantee for their safety; the tax now often devolving upon medical practitioners would fall on the shoulders of the companies, which, however, would gain far more than they would lose by the change; and the general interests of humanity would be served.

In conclusion, I believe that the man of means and influence, who would grapple with this subject, and devote his energies to arousing the public and life insurance companies, railroad directors and legislatures to the matter, would as much entitle himself to be regarded as a public benefactor as the founder of the Royal Humane Society.

Yours, &c.,

A Country Surgeon.

NOTE TO DR. ROGERS'S PAPER ON REDUCTION OF DISLOCATIONS AT SHOULDER-JOINT.

[To the Editor of the American Medical Times.]

Sir:—In reading over my paper on Dr. N. R. Smith's method of reduction of the dislocation of the shoulder-joint, I discover the omission of a note I had prepared, to account for my silence respecting the long head of the *triceps*, while upon the subject of the muscle connecting the scapula and the forearm—the biceps. By accident it got out of place, and I have only now found it by looking among my papers. It accompanies this, and even at this late date you will do an act of justice both to the subject and to myself, by giving it a conspicuous place in the pages of your journal.

Yours, &c.

S. Rogers, M.D.

New York, Nov. 28th, 1861.

"Anatomically, and physiologically, the long head of the triceps belongs to this class, but surgically, it is a muscle of little importance in this dislocation, from the fact that in the common dislocation into the axilla, the head of the bone passes entirely forward of it, and consequently in either of the usual modes of reduction discussed in my paper, does not come in contact with it, and of course does not in any way oppose reduction; or at least does not mechanically. As in either manipulation it is completely relaxed, it cannot be supposed to afford any physiological obstacle. In the rare dislocation, backwards into the infraspinatus fossa, the head of the bone passes above it. By anatomists it is stated to protect the head of the bone from downward and backward dislocation, but I must confess my inability to see, that as an articulatory muscle, it is of much importance. To me it appears to have particular value as a part of the extensor muscle of the forearm, in consequence of its longer fibres and greater range of action than the two other portions of this muscle. In the manipulation advocated in this paper, the portion of the triceps in question is perfectly relaxed, and therefore, opposes no movement whatever."

RECLAMATION.

[To the Editor of the American Medical Times.]

Sir:—Permit me to correct a misstatement through inadvertence or forgetfulness, in the inaugural address of my friend, Professor McCready, at the opening of the Bellevue Hospital Medical College. The learned professor, in the course of his remarks, takes occasion to say:—"Something more than twenty-five years ago, I was a student of medicine in this our goodly city of New York. * * * Clinical teaching—I am speaking of medicine,—there was none, at least none worthy of the name. On the performance of a capital operation, the theatre of the New York Hospital would be well filled with students and doctors, and occasionally during the winter, some half dozen students would be galvanized to attend the physician on duty in his visits to the wards; but the attendance evidently soon became equally tedious to the professor and the students, and in a week or two was sure to terminate."

Now, with all becoming deference, I beg leave to dissent from this statement. At the New York Hospital since the time of Dr. David Hosack until the present hour, the importance of clinical instruction has been fully insisted on, and there has always been *clinical teaching*, in its appropriate place (at the bedside), with occasional clinical lectures. Within my recollection (since 1826), a series of clinical lectures were delivered in the Hospital Theatre by the late Dr. John Watts, President of the College of Physicians and Surgeons. Dr. A. H. Stevens was in the habit of delivering several lectures in the course of his attendance, every season; many of these have been published in pamphlet form, and in the medical journals. The visits of Dr. Mott were attended by a large number of students, and it was his constant practice to remark fully upon all cases presenting any points of interest. The same remark will apply to the visitations of Drs. Thos. Cock, Sr., J. Kearney Rodgers, and Jos. M. Smith. At a later date, in 1842, Dr. J. A. Swett delivered at the New York Hospital the first course of lectures on diseases of the chest, and in subsequent years he continued to lecture down to the period of his decease. Drs. John Watson and H. D. Bulkley have also delivered frequent courses of lectures, and with great acceptance; but these were established under the *new régime*, and since the period alluded to by the Professor. I only wish to claim that "something more than twenty-five years ago," there was "clinical teaching worthy of the name," in this our goodly city of New York.

Yours, &c.,

J. G. A.

NEW INSTRUMENTS FOR TRACHEOTOMY.

[To the Editor of the American Medical Times.]

Sir:—In the course of a series of experiments on respiration, performed some time since, I had occasion very frequently to perform tracheotomy on animals, and being generally without an assistant, experienced much delay and embarrassment from the extreme caution necessary to prevent troublesome hemorrhage. This led me to seek for some instrument for the division of the tissues between the skin and the trachea, which should be safer than a knife, and more expeditious and certain than the fingers or the handle of the scalpel. Accordingly I had two instruments made, resembling the hook used in the operation for strabismus, but stronger and somewhat more pointed at the extremity. Taking one of these in each hand, and operating something as one would with dissecting needles, I was enabled to divide one layer of tissue after another with the utmost safety and despatch. The points of the instrument were so blunt as to render it almost impossible to penetrate the coats of a vessel, and hence the liability to hemorrhage, which constitutes the chief danger in this operation, was avoided. Indeed, I have often opened the trachea almost without shedding a drop of blood, except that from the skin and from the trachea itself. In an operation recently performed upon a child by the aid of these instruments, I did not find it necessary to employ a sponge during the whole operation.

In my experiments upon animals, I found that this manner of dividing the tissues did not prevent their union by first intention. It appears to me that these instruments might be useful, not only in tracheotomy, but in all operations where it is necessary to expose important vessels or nerves, as in ligating arteries, cutting down upon bullets in the neighborhood of large vessels, etc.

Yours, &c.

A. H. Smith, M.D.

Bristol, Penn., Dec., 1861.

THE CASE OF DR. HASBROUCK.

[To the Editor of the American Medical Times.]

Sir:—I notice in your Journal of the 23d an extract from a letter published in the "*London Standard*," describing a visit to the Lunatic Asylum on Blackwell's Island, in which allusion is made to Dr. F. Hasbrouck, late of this village, in the following terms:—"* * * * He left medical life, and started a paper at Fishkill (Peekskill). A few months ago the mob went to his office, and dragged him out on account of a secession article that had appeared in the columns of his paper. The effect has been terrible. He is a hopeless maniac, but harmless," etc. Now the facts of the case are as follows:—Dr. H., after leaving New York, practised his profession for some years in Sing Sing, where he was physician to the State Prison; he afterwards removed to Tarrytown, where he failed in acquiring much professional business. Some three years since he removed to this village and assumed the editorship of an old democratic paper, in connexion with the practice of medicine. He totally failed, however, in gaining the confidence of the community as a physician. His strong and unreasonable political prejudices, excitability, lack of judgment and foresight, with other disqualifying traits, soon satisfied the readers of his paper that he could not succeed in his editorial capacity, as the result proved. More than a year ago his friends believed him totally insane, and predicted that unless he abandoned politics he would eventually become wholly so. Among his eccentricities may be mentioned his nomination of Sam Houston for the Presidency, offering himself as a stump candidate for Congress, sustaining the Southern Confederacy, etc., etc. To the writer Dr. H. often avowed his belief that he should die of cerebral disease, as he suffered greatly at times from pain in the head, owing to a severe fall on the ice, when about sixteen years of age, striking on the back of the head with great violence. It is also stated on good authority that he had formerly suffered from insanity when residing at Sing Sing, and that it is hereditary in the family. There is no truth whatever in the statement that he was dragged from his office, etc. This probably grew out of the fact that at a Republican flag-raising he was called on for a speech, and told by several of those assembled that he must retract some secession statements he had made, and pledge himself to sustain the Union cause. Soon after this he became furiously insane, but his family and most intimate friends had been daily expecting it for weeks if not for months previously, and in fact had excused his acts, as well as editorials, on the ground that his mind was not wholly sound. During all this time he had been jealous and suspicious of his best friends, wholly insensible to advice, wrong-headed, perverse, irascible, and implacable—in short, his insanity came on gradually, as it usually does, and was marked by the usual phenomena, except that it was complicated with violent epileptic convulsions, continuing for hours—a disease, moreover, from which he had formerly suffered. These statements are made in justice to the citizens of this village, who, notwithstanding the fact that the paper, conducted by Dr. H. and now by Dr. H. Sr., has been indicted by the Grand Jury of the county for its treasonable character, have peaceably tolerated its secession articles, and neither threatened nor inflicted any violence upon its conductors.

Yours, &c.,

Justice.

Peekskill, Nov. 28, 1861.

Army Medical Intelligence.

Surgeons of the Second Naval Expedition.—Medical Director, Dr. W. H. Church, of New York. 51st Reg., N. Y. Vols., Surg., Dr. E. W. Buck; Assist. Surg., Dr. C. W. Torrey. 53rd Reg. N. Y. Vols., Surg., Dr. H. J. Phillips, Assist. Surg., Dr. Dubreuil. 23rd Reg. Mass. Vols., Surg., Dr. Geo. Derby; Assist. Surg., Dr. Silas E. Stone. 24th Reg. Mass. Vols., Surg., Dr. Sam. A. Green; Assist. Surg., Dr. Hall Curtis. 25th Reg. Mass. Vols., Surg., Dr. J. Marcus Rice; Assist. Surg., Dr. Theron Temple. 27th Reg. Mass. Vols., Surg., Dr. Geo. A. Otis; Assist. Surg., Dr. Samuel Camp. 8th Reg. Ct. Vols., Surg., Dr. De Witt C. Lathrop; Assist. Surg., Dr. J. V. Harrington. 10th Reg. Ct. Vols., Surg., Dr. A. T. Douglas; Assist. Surg., Dr. M. F. Newton. 55th Reg. Penn. Vols., Surg., Dr. Livergood; Assist. Surg., Dr. Noble.

Dr. John McNulty, formerly Surgeon to 37th N. Y. Vols., has been appointed Brigade Surgeon on the staff of Major General Dix, at Baltimore, and Dr. Wm. O'Meagher has been appointed Surgeon in his stead.

VENEREAL IN THE ARMY.—SUGGESTIONS AS TO ITS REMOVAL.

[Army Correspondence of the American Medical Times.]

The Sanitary Commission, which extends a sort of general survey over the sanitary regulations of the entire army, seems to have overlooked one very fruitful source of disease, which is not beyond their power to remedy. Not a day passes in the service of any regiment in which at least five men thereof are not unfit for duty from gonorrhœa or some form of venereal disease or their effects, and as the army remains stationary the mischief seems to be on the increase. When we multiply this number by the number of regiments in the field, the detriment to the public service assumes such magnitude as to justify the military in adopting the most stringent measures for suppressing the source of this mischief. Houses of prostitution spring up, and multiply in every village, town, and city contiguous to encampments, and Washington especially is at present stocked with the pestilential dregs of northern cities, from which we may expect during winter more havoc to the health of our soldiers than from fever or any other disease. We are aware that the moral sensibilities of the country do not allow the salutary regulations adopted by European governments to be applied to the class of women who follow the degraded life of prostitution, but the public weal at present requires that the health of the army should not be sacrificed to misguided sensibility, and demands either that the diseased prostitutes should be confined in an asylum where they can inflict no public loss, or that the houses of prostitution should be rigorously closed, and their inmates subjected to the most rigid police surveillance. The surgeons in camp, who witness daily the effects of this evil, have no means of correcting it, or of drawing the attention of the military authorities in Washington to it. The sanitary commission, to whom so much has been intrusted in regard to health regulations of the army, and whose province it is, if they have any, to suggest to the heads of the military department whatever tends to secure the health of the troops, might very properly include some regulation regarding this evil and its source among their recommendations. We think they would, by bringing military authority to check this evil, confer a greater benefit on the army than any they may lay claim to from their suggestions regarding ventilation, cleanliness, sinks, the antidotal effects of quinine, and many other of the like, which perhaps were as fully appreciated before as after they were promulgated with their sanction.

Yours, &c.

Field Surgeon.

NAVY SPLINTS.

[To the Editor of the American Medical Times.]

Sir:—The splints furnished by the Navy Department are models of simplicity, utility, and economy. They can be easily made by the ship's carpenter at sea, under the direction of the medical officer.

The set of splints consists of a double inclined plane; a long splint for fractures of the lower extremities, with a belt and perineal pad and strap; a short carved splint for the inside of the thigh; two carved splints for general use (all of which have pads fitted and tied on them); a set of leathered wooden splints, two sheets of cotton wadding, and a package of tow. The double inclined plane has the lower part so arranged as to be easily detached, and used as a fracture-box when required. It is also provided with large buttons on the bottom, which, when turned crosswise, make the apparatus sit more firmly on the mattress.

The long splint for the lower extremities is adapted for the use of an adhesive plaster extending band. A strip of adhesive plaster about two inches wide is applied to the limb, in the direction of its axis, from near the seat of fracture, down one side and up the other, leaving a loop or stirrup under the sole of the foot. The whole is then enveloped with a roller bandage, applied with a moderate degree of firmness. A thin piece of board, about two inches square, is made to adhere to the inside of the loop or stirrup at the sole of the foot, and around this, and over the hook of the splint, a piece of tape is passed, by which to make extension.

A pocket is made in the belt to receive the upper end of the splint; and the buckles on the outside of the pocket receive the ends of the perineal straps for counter-extension.

To adapt the splints to opposite sides it is only necessary to take out the hook, and adjust it so that the opening looks upwards.

Yours, &c.,

W. K. Scofield, M.D., U. S. N.

Fevers at Fortress Monroe.—An intelligent surgeon writes: The fevers here are the most refractory I have ever witnessed, resisting the best remedial agents. Quinine is wholly ineffectual in all its stages, but is still to be commended as a prophylactic and tonic substance. Emesis, the more powerful the better, I have learned to be the only reliable treatment in the initial stage of typhoid. Even if nothing else is done, this will suffice to place the disease under what we may term "control," and without it you may as well confess yourself, at a very early point in its progress, vanquished

The Number of Candidates that have applied to the Medical Examining Board of the State of New York is 431, of which 203 passed as Surgeons, 155 as Assistant Surgeons, and 69 were rejected. The Board consists of Drs. Hun, March, and Cogswell, of Albany.

Naval Medical Board.—The Naval Medical Board, composed of Surgeons John A. Lockwood, Charles H. Wheelwright, and John Y. Taylor, continues its sessions at the Naval Hospital, Brooklyn. Forty-eight candidates have been reported qualified since the 1st of August. Ten more are required to fill existing vacancies. Qualified medical men under twenty-six years of age, wishing to enter the navy, should apply to the Hon. Gideon Welles, Secretary of the Navy, for permission to appear before the Board for examination, stating age, place of birth, and actual residence, accompanying their request with testimonials of moral character. The following gentlemen have been found qualified since the last publication:—Thomas N. Penrose, Penn.; Samuel W. Abbott, Mass.; Edward C. Ver Meulin, N. J.; Thomas Hiland, N. H.; Newton H. Adams, N. Y.; George D. Slocum, N. Y.

Medical News.

Graduates at the Berkshire Medical College.—The following gentlemen received the degree of doctor of medicine at the Berkshire Medical College, at the close of the session of 1861, after examination: David DeLos Bowen, John Thomas Benham, David Foss, George Washington Gale, Jr., Lucius Barstow Irish, Robert Hazard Morey, Louis Edwin Norris, Nathaniel Morton Ransom, Samuel Kenrick Rich, Myron Winslow Robinson, Frank Augustus Sabin, Joel Stevens, Charles Elliot Streeter, Augustus Van Cleef, and Nathan Hand Wright; and Robert William Gray, M.D. Dowdoin, *ad eundem*. We are too early in press for further particulars.—*Berkshire Med. Jour.*

Questions in Anatomy.—Professor Ford has prepared for his classes a series of anatomical questions, of which we have received the first fasciculus, containing more than 500 questions on osteology. They are very full, as may be supposed from their number, and cover the structure and relations of all the bones; and as there are no answers printed with them, they form a very valuable catechism.—*Berkshire Med. Jour.*

Death of Geoffroy St. Hilaire.—This great naturalist died on the 10th Nov., at the age of fifty-six. Isidore Geoffroy St. Hilaire was a member of the Academy of Sciences, Honorary Inspector-General of Public Instruction, Professor at the Museum of Natural History, Professor of Zoology at the Faculty of Sciences, and member of the Academy of Medicine. By his exertions the zoological gardens, lately established at the Bois de Boulogne, were founded. The deceased *savant* was the son of Etienne Geoffroy St. Hilaire, whose fame he has worthily continued; he was born at Paris, at the Jardin des Plants, on the 16th of December, 1805.—*Lancet.*

Original Lectures.

CHLORATE OF POTASSA, POTASSÆ CHLORAS, KO, ClO_5.*

BEING ONE OF A COURSE OF LECTURES

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

We shall spend but little time upon the chemical composition or manufacture of this salt. As its formula declares, it is composed of one equivalent of KO (potash), and one of ClO_5 (chloric acid). It is similar in its chemical combination to KO, NO_5 (nitrate of potash), KO, SO_3 (sulphate of potash), NaO, ClO_5 (chlorate of soda), and NaO, NO_5 (nitrate of soda); its medicinal action is not altogether unlike these. As the salt has been very much used of late, and as it has attracted an unusual amount of attention from the medical profession, we shall consider it at some length in its physiological, therapeutic, and toxicological relations. As some of the ill effects that have occurred from this salt have been stated to be owing to the impurities it contains, we will give simple tests for detecting these impurities.

KO, ClO_5 crystallizes in nearly rhomboidal plates. Its taste is cool and somewhat similar to KO, NO_5 (nitre). When rubbed in the dark it becomes luminous. One hundred parts of water at 32° dissolve 3.5 of KO, ClO_5; at 59° six parts; at 120° nineteen parts. Its most usual impurity is KCl (chloride of potassium). A solution of AgO, NO_5 (nitrate of silver) added to a solution of this salt should occasion no precipitate; if there is a precipitate it is $AgCl$, and it proves the presence of KCl. The silver precipitate is insoluble in NO_5 (nitric acid), but soluble in NH_3, HO (ammonia).

No very minute chemical examination has been made of this salt. I do not think that it has many adulterations made on purpose, but that the impurities in it are owing rather to faults in its manufacture.

We have stated that a frequent admixture of KO, ClO_5 is KCl, and we have shown you that AgO, NO_5, will occasion a precipitate in such a solution. But there are, in my opinion, some of the other compounds of Cl. and O. present, for if by careful preparation a very pure salt of KO, ClO_5 is evaporated at a high temperature, there are no unpleasant fumes given off, whereas, from a salt which is not pure, or has not been purified by repeated crystallizations, there are fumes given off when the solution is brought to a high temperature that are exceedingly irritating to the eyelids, and also to the lungs. I do not know, nor have I seen it determined, what these fumes are, but I believe them to be ClO, or ClO_4. When speaking of Cl. I gave you the various combinations of Cl and O. Let us refer to them again, we have

Hypochlorous acid, ClO; Chloric acid, ClO_5.
Chlorous acid, ClO_4; Perchloric acid, ClO_7.

Now, although I am not able to state positively, it is my belief that most of the samples of KO, ClO_5 that we obtain, contain admixtures of other chlorine acids, and that we have in the salt hypochlorites and chlorites. That we frequently have admixtures of $CaCl$ (chloride of calcium) is demonstrable, not only from its moist appearance, but from its giving a precipitate with NH_4O, C_2O_3 (oxalate of ammonia). If the salt has a yellow color, it contains a small amount of Fe_2O_3 (iron), which may be proved by the addition of $2K,Cfy_3$ (yellow prussiate of potash), which produces a blue color. Although it is desirable to have every substance perfectly pure, this slight admixture of iron would not injure the medicinal properties of the salt. The most constant fraudulent admixture is with KO, NO_5 (nitre); the appearance and shape of the crystal would, to some extent, indicate this admixture. But if the adulterated salt is exposed for some time to a red heat, it gives off O, becoming first $KONO_3$ (a nitrite), and afterwards KO (fused potash), as the O and NO_3 are given off. A solution of this in water imparts a brown color to turmeric paper. The nitre then, we see, loses a portion of its acid, while KO, ClO_5 its oxygen, and leaves behind a neutral KCl, which does not turn turmeric paper brown.*

In speaking of the therapeutic action of this salt, we shall also have to mention in connexion with it NaO, ClO_5 (chlorate of soda), so that we may as well mention here its chemical composition.

Sodæ chloras, NaO, ClO_5.

This salt cannot be prepared like KO, ClO_5 by passing chlorine through a solution of its carbonate, because the $NaCl$ (chloride of sodium), which forms at the same time, possesses the same degree of solubility; it is prepared, therefore, by decomposing KO, ClO_5 with NH_3, SO_3 (sulphate of ammonia), and again decomposing the NH_3ClO_5 (chlorate of ammonia), formed with NaO, CO_2 (carbonate of soda).† It can also be made by mixing KO, ClO_5 with $(NaO, \bar{T})+(HO, \bar{T})$ (bitartrate of soda) in solution.

These are both expensive and troublesome processes for making NaO, ClO_5 (chlorate of soda), and have accounted for the reason of its being so much dearer than KO, ClO_5 (chlorate of potash). But the two salts can be now obtained at nearly the same price, so that we know that the large manufacturers now make it by a more ready process, although they have not made it public.

Characteristics.—NaO, ClO_5 forms colorless crystals, which are without odor, and of a mild saline taste. It is not deliquescent, but remains unaltered in the air. Heated to redness, it fuses, parts with a portion of its O, and is converted in $NaCl$, which is neutral and should not turn turmeric paper brown. It dissolves in four parts of water at 60° and in equal parts of boiling water. If it is contaminated with $NaCl$ it may be detected by the white precipitate caused by AgO, NO_5 (nitrate of silver); if NH_3, HO (ammonia) is present, by the odor given off by the addition of KO, HO (liquor potassæ); and if NaO, CO_2 (carbonate of soda) is present, by the effervescence with dilute acids, and by its alkaline reaction.

Those of you who reside in the cities can, by going to a good apothecary, obtain these salts in a pure form, but those of you who reside in the country, should either purify the medicines you use or buy them of respectable druggists. You can obtain these salts perfectly pure by getting those prepared by Dr. Squibb. From the easy solubility of NaO, ClO_5, it is difficult to purify this salt by re-solution and crystallization; but the KO, ClO_5 may be obtained very pure by repeated solutions and crystallizations, and this should be resorted to when there is any doubt.

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* On reading Dr. Percy's lectures, we find he uses the symbols of the articles he mentions, and we have added the common names.—Ed.

* I here present you a specimen of KO, ClO_5 that was passed by the late Drug Examiner and obtained by me at a wholesale store. It is of French manufacture. My assistant, Mr. Bacon, will now show you the various tests. These test tubes are all nearly filled with a solution of this KO, ClO_5 into the first we will drop a small quantity of solution of AgO, NO_5 and you observe the abundant cloudy precipitate of Ag, Cl, proving the presence of KCl. Into the second, he drops a solution of $NH_4O, \bar{O}$ and you again see a large white precipitate of $CaO, \bar{O}$ proving the presence of $CaCl$. Into the third he drops a solution of $2K.Cfy$ and we have a deep blue color of Fe_7Cy^9, showing the presence of $Fe\,O_3$. I find that it contains no KO, NO_5; but that these admixtures, and they are all very large in quantity, are from carelessness and slovenliness in the manufacture.

We will now try the same tests with some I obtained from the Drug Examiner's office to-day; you see that it yields a slight precipitate with AgO, NO_5, showing that it contains a small quantity of KCl, but that by the other tests it is not guilty of the other admixtures.

I show you also a sample I obtained from Mr. Neergaard, prepared by Dr. Squibb, of both KO, ClO and NaO, ClO_5, and you see by the various reagents that the KO, ClO_5 is quite pure, and that the NaO, ClO_5 contains but a small amount of $NaCl$. These were obtained in powder directly from Mr. Neergaard's sale bottles, they speak volumes for both manufacturer and pharmaceutist.

† Reactions, $KO, ClO_5+NH_3, SO_3=NH_3ClO_5+KO, SO_3$.
$NH_3, ClO_5+NaO, CO_2=NaO, ClO_5+NH_3, CO_2$.

Dr. Fountain and others have attributed many failures in the use of KO, ClO_5 to the impurities contained in it, and recommend that the French should be the only kind employed. This is rather more than indefinite, and it will be found, upon visiting the office of the inspector of drugs, that the various samples of French manufacture differ as much in their quality and appearance as those from any other part of the world. The solubility of the two salts differs very much, for whereas, NaO, ClO_5 (chlorate of soda) is soluble in four parts of water at 60°, KO, ClO_5 (chlorate of potassa) is soluble in sixteen parts of water; and this, to a certain extent, accounts for the milder action of the soda salt, for it is universally acknowledged to be milder in its action.

Uses.—KO, ClO_5 has been used for many years, chiefly in diseases of a malignant type, as scarlatina maligna, cynanche tonsillaris, etc., etc. In these diseases it has been used either alone, dissolved in water, or in combination with dilute HCl (hydro-chloric acid). But we will for awhile pass over its use in these diseases, and refer to its comparatively more modern applications.

At a meeting of the American Medical Association, held in June, 1860, Dr. E. J. Fountain of Davenport, Iowa, read a paper on the "Treatment of Phthisis by the Chlorate of Potash, with observations on Oxygen and Ozone as therapeutic agents." Dr. Fountain takes for his text to this paper, the following sentence from Liebig:—"Oxygen is the leaden weight or bent spring which keeps the clock in motion; the inspirations and expirations are the motions of the pendulum which regulate it."

Dr. Fountain's theory of the application of KO, ClO_5 is a strictly chemical one; he asserts as a fact, that we have in this salt an agent fully capable of arresting the progress of, and curing many diseases which are produced and perpetuated by imperfect aëration of the blood. And also, that in many instances where the blood is not deficient in its normal quantity of oxygen, we may increase the absorption of many organic products by rendering the blood more highly arterialized by the agency of KO, ClO_5. "Among these products were included tubercular deposits, as these were believed to be the result of an imperfect elimination from the system of the products of organic decay of the tissues of the body, and are composed principally of protein compounds which are rendered soluble by the addition of one or two equivalents of oxygen, converting them into deutoxide and tritoxide, which permits their absorption by endosmosis into the adjoining vessels. It was suggested that chlorate of potash might be found a valuable remedy for supplying the blood with an excess of oxygen sufficient for this purpose."—*Fountain.*

Dr. Fountain relates three cases of phthisis and their treatment with KO,ClO_5. The improvement in all of them was very marked. Of the last case he says: "He took half an ounce of chlorate of potash daily for six weeks, and two drachms each day for the succeeding four weeks;" and he says in his remarks on these cases, "In these cases although the treatment was purely experimental it was not empirical, for the chlorate of potash was given on the assumed principle of *conveying oxygen to the blood*, by which I expected to relieve the lungs of a portion of their task; increase the vital power of the blood, and render it more capable of faithfully performing all its functions; and by which tubercular deposits might be arrested, and absorption of those already formed promoted." Again, he says, "Whatever may be the results of a more enlarged experience some important *facts* are established by the foregoing cases and others which have been elsewhere reported.

"1st. The chlorate of potash can be given in large doses every day, for a long period, without injury.

"2d. It aids the functions of respiration by supplying the blood with oxygen.

"3d. It operates as a natural *tonic, alterative, and blood depurant*, by increasing the supply of that element which is the most active agent of nature in the chemical changes which take place in the laboratory of the human system."

You will perceive that this was a favorite remedy with Dr. Fountain; how far he was led astray by his earnestness we will see hereafter. Dr. Fountain in administering these large doses did not act experimentally, he had already used them upon himself. Dr. Osborn, in an article in the *London Lancet*, cautions the profession in the use of KO, ClO_5, and says he has seen congestion of the brain, and convulsions, follow its use in children. In experimenting upon himself, he says, he felt symptoms of congestion of the brain, with slight paralysis of one side of the face, on taking fifteen grains of the chlorate. This appears something like Homœopathic provings. In an article in the *Medical Press* for Nov. 19, 1859, Dr. Fountain opposes to this his own experience, and says that he has often administered KO, ClO_5 in drachm doses, three times a day, for many days and weeks together. He further says, "After reading the article (of Dr. Osborn's), I called at a drug store and had weighed out for me half an ounce of chlorate of potash, the *whole* of which I took at *one dose*, the same evening. I was in perfect health, and took it as a simple experiment." He says he felt no inconvenience from the dose. Dr. Fountain claims to have used KO, ClO_5 in large doses for several years; he says, in the *American Medical Times*, of February, 1861, "From the time when, in 1851, *I discovered* its utility as a remedy for mercurial ptyalism, I have been testing its properties in many directions and with constantly increasing confidence in its virtues, and its scarcely less than wonderful power." This paper of Dr. Fountain's attracted a great deal of attention, and many studious and scientific men have investigated the subject with less enthusiastic ardor, but with closer observation than was bestowed upon it by Dr. Fountain; their results we will give you in their proper place. There were occasional articles in the medical journals criticising Dr. Fountain's theories, and differing with him as to the safety of the doses he administered.

In December, 1860, a man with tubercular phthisis and ulceration of the throat, presented himself to Dr. Elsberg, of this city, for treatment. Dr. Elsberg ordered him eight ounces of KO, ClO_5, to be divided into twelve parts; one of these parts to be put into a quart of water. With this the throat was to be gargled frequently through the day, and occasionally a mouthful of it to be swallowed. The man, instead of using it as a gargle, took the whole of the quantity daily prescribed, for four days in succession. He then complained of nausea and gastric irritation, and sent for a doctor near him; he continued to grow worse, and died in about a week. A coroner's inquest was held in which the doctors who officiated made a most sorry appearance. They held a so-called post-mortem examination, in which they examined but one organ—the stomach, and yet gave it as their opinion that the man died from the pernicious effects of KO, ClO_5. Their testimony that was printed showed shameful ignorance of the effects of the remedy, and lamentable carelessness in their examination at the post-mortem. They seemed to have entirely forgotten that they were expected to make a careful and scientific examination, so that they could state what organs of the body were diseased, and what were healthy, and that they were to do this both for the cause of truth and their own reputation. They had no right to be careless, for in addition to this a professional brother's reputation might be brought into jeopardy. Upon the evidence presented, the jury in this case brought in their verdict that the man died from the poisonous effects of the KO, ClO_5 administered.

This case, together with the assertions that were made, that these large doses were injurious, and even dangerous, was noticed by Dr. Fountain. This he strenuously denied, and even asserted that it might be taken in much larger doses with impunity from evil consequences. As he supposed, to confirm this opinion, on the 22d of March, 1861, he took at *one dose, one ounce* of KO, ClO_5. "The most violent results ensued, the main and immediate effects being on the kidneys. Inflammation of the intestines followed. The action of the drug seemed to expend itself immediately upon the kidneys, a copious diuresis having occurred through the 22d until ten P.M. From five A.M., on the 23d, until the time of his death, there was no secretion whatever from the kidneys." He died on the 29th March, after an illness of a week.

Thus for the sake of scientific truth, to verify what he believed to be a fact, an ardent, enthusiastic, and diligent laborer sacrificed a valuable life. His experiment upon his own person proves both his honesty and his faith. Truly did he make himself a martyr of humanity, and his memory will not die!

Dr. Fountain took this large dose of one ounce, experimentally, and with the hope of convincing others that its administration was perfectly safe; he undoubtedly did not know that the same dose had been administered several times by Prof. Tully to his students, more than thirty years ago. A number of these experiments are recorded in the *Boston Medical and Surgical Journal*, vol. vi. In some of these cases one ounce of the salt was taken at a dose, and in others half an ounce. From the results of twelve experiments of these large doses, Dr. Tully concludes "that KO, ClO_5 possesses between a third and a quarter of the medicinal activity of KO, NO_5 (nitre);" also that "the operation of this salt appears to be precisely similar not only in kind, but even in degree to the effects of carbonate of potassa and soda." He further remarks that "when used in a large quantity at once, or within a short period, though short of the amount that will occasion what is called actual poisoning, each of these salts (carb. nitr. and chlor. potassa) produces a soft and feeble pulse, great flatulence, and often cardialgia, uneasiness, and a strong sense of load, or weight, or distension in the epigastrium, gradually increasing to a steady pain, like the beginning of colica ileus, with intolerance of pressure, progressively extending to the umbilical region, and even to the whole abdomen, subsequently becoming extremely acute and lancinating, the time of action and tenderness augmented in proportion to the severity and continuance of the pain, and sometimes attended at last with severe vomiting and more or less spasms." Those of you who wish, can read the whole of this interesting article in vol. vi. of the *Boston Medical and Surgical Journal*, but a condensation of it by Dr. Lee may be found in the *American Medical Times* for July 6, 1861. Dr. Fountain's paper attracted a great deal of attention before the Am. Med. Ass., and he was requested to continue his observations; others promised to help him. Prof. Flint has lately given the results of his experience, in furtherance of his promise. He tried the effects of this agent in his hospital practice, and entirely disagrees with Dr. Fountain as to its beneficial effects in phthisis. He reports to the *American Journal of Medical Sciences*, a number of cases treated with this agent, in which no benefit was received, and some in which it seemed to do injury. Dr. Guy reports two cases of phthisis, treated in the Buffalo Hospital by Dr. Fountain's plan, both of which seemed rather injured than benefited by it. There are also other like cases to be found in the journals. You will remark that Dr. Fountain's idea was that it entered the system as KO, ClO_5, that while in the blood it parted with six equivalents of oxygen and passed out of the system as KCl. Now, although to some extent this change does undoubtedly take place, it is proved beyond conjecture that it does not all pass off as KCl, for even in moderate doses it has been found in the urine in the same form as when taken, and in large doses it has been found abundantly. Wherein then is the use of these large doses? It certainly does not, when taken at these long intervals, maintain during the whole time this additional amount of oxygen in the blood, and as the salt either as KO,ClO_5 or KCl is not needed in the blood in these quantities, it must act as an irritant and be carried off either by the kidneys or bowels. As it is not a very soluble salt it cannot be carried off very rapidly by the kidneys, and I am not aware that any experiments have been made to see whether it exists in the fæcal discharges of patients taking it, but I have no doubt it may be found there, as MgO, SO_3, KO, NO_5, KO, SO_3, and other salines have been found in like circumstances. I have detected it in the fæces in two instances. That it produces alvine discharges is stated by many who have administered it, and that salines that produce alvine evacuations are found in these discharges is proved by many physiologists. Until this point is settled then, or until the whole of the KO,ClO_5 taken is found in the urine, as KCl, or by its total absence in both of these excretions, the urine and fæces, it is not proved that it has parted with its oxygen, and that it acts upon the system in the way of this chemical change.

The question may, I think, be fairly asked and argued; is the beneficial result that is said to be produced in phthisis by this salt, owing to the disengagement of oxygen, or to the known power of alkaline bases or salts to arrest decay when in sufficient quantity, and not too long continued?

Oxygen as a therapeutic agent has been most thoroughly tried by every known means of administration, and abandoned, as failing to produce the beneficial results sought for; and men like Sir Humphrey Davy, James Watt, and Dr. Beddoes, have been the experimenters. Supposing that this salt did disengage into the blood all its oxygen, in what manner would this oxygen differ either in its composition or effects from that absorbed by the lungs, and thus mixed into the current of the circulation? The oxygen eliminated from the same material and inhaled into the lungs, and carried into the circulation, and *proved* to exist there, fails to produce the results and improvements claimed by Dr. Fountain and others to be produced by KO,ClO_5. And supposing a drachm, or even half an ounce—the maximum dose given with safety—is administered, how small would be the amount of oxygen evolved in comparison with that taken in by the lungs. Liebig, in his observations on poisons, contagions, and miasms, says, "Iodide of potassium, sulpho-cyanuret of potassium, ferro-cyanuret of potassium, *chlorate of potash*, and all salts with alkaline bases, when administered internally to man and animals, in dilute solutions, or applied externally, may be again detected in the blood, sweat, chyle, gall, and splenic veins, but all of them are finally excreted from the body through the urinary passages. Each of these substances in its transit produces a peculiar disturbance in the organism—in other words, they exercise a medicinal action upon it, but they themselves suffer no decomposition. If any of these substances enter into combination with any part of the body, the union cannot be of a permanent kind, for their reappearance in the urine shows that any compound thus formed must have been again decomposed by the vital process." Although I am not willing to subscribe to these assertions of Liebig's as here written, they are in the main correct as qualified and explained in other parts of his work. Liebig again says, "Salts of mineral acids with alkaline bases completely arrest decay when added to decaying matter in sufficient quantity, and when their quantity is small the process of decay is protracted and retarded. They produce in living bodies the same phenomena as the neutral organic salts."

This to a certain point is the action of KO, ClO_5 in phthisis. In certain cases it does for awhile arrest decay, and afford great relief, and of this character I have no doubt were the three cases reported by Dr. Fountain. Soon after Dr. Fountain's announcement I tried it in two out of several cases of phthisis I had under my care. One of these was a young man, just arrived from the west for the purpose of obtaining medical advice. I found him in a debilitated condition, and the physical signs demonstrated that the right lung was in an advanced stage of decay—the left not so much so. The countenance was livid, the gums and mouth were sore, he was troubled with pyrosis, and the urine had a strong acid reaction. I administered half a drachm of KO, ClO_5 four times a day in an infusion of bitter herbs; and a carefully prepared but more liberal diet. For the first four days I tested all the urine he passed, and could find but a mere trace of KO in that voided during each twenty-four hours. My examinations were then made every second day with the same absence of KO. After the sixteenth day it was much increased in quantity, and continued to increase until I detected both KCl and KO, ClO_5 in the secretion. In the meantime he had much improved in health and appetite, but began to complain of pain in the bowels. The bitter infusion was continued without the KO, ClO_5, and the pain was no longer felt. The other case was treated in the same manner, and with the same results, until both KCl and KO, ClO_5 were detected in the urine, where for many days previous hardly a trace of KO could be found. After this time the KO, ClO_5 in both cases seemed to irritate the stomach and bowels. It was serviceable so long as it acted as a restorative hæmatic, supplying to the system a deficient material, and while the base was abstracted for use in the system, the oxygen was no doubt absorbed, but as the system became saturated with the alkali, the salt unchanged appeared in the urine and face. I have found the same result in another case, which I will mention by-and-by. We see, then, that Liebig's observation as to these salines being passed unchanged in the urine, only applies to a state of health, and not to one of disease, where the base is needed in the system; for we see by these experiments that for many days not even the base was found, then it appeared in some quantity, and afterwards the salt unchanged was discovered in some quantity.

The revival of the use of this salt, in a chemico-physiological point of view, is due to experiments made by Dr. O'Shaughnessy about the year 1830. He injected a solution of it into the cervical vein of a dog, and it was found to impart a fine scarlet color to the blood; the pulse rose in fulness and frequency. Traces of the salt were found in the urine unchanged.

In another series of experiments in which the animal had been stupified with HCy (hydrocyanic acid) and HS (hydro-sulphuric acid) half a drachm of KO, ClO_5 was dissolved in blood-warm water, and injected into the jugular vein; the pulsations of the heart, which had almost ceased, returned almost immediately, and the blood assumed a scarlet color. In these instances the KO, ClO_5 was also found in the urine. From these and some other experiments it was argued that the salt parted with its oxygen to the blood, and it was recommended on this account in scorbutic affections, venereal diseases, hepatic affections, cholera, phthisis, and other diseases in which a want of oxygen was supposed to exist in the system. Pereira says, "It appears then that most of the uses of this salt have been founded on certain views of chemical pathology, and some of which are now considered untenable. It is very desirable, therefore, that some person unbiased by theoretical opinions would carefully investigate the effects and uses which I am inclined to think have been much overrated." Dr. Fountain has done much to clear up this theory, not that he was unbiased by theoretical opinions, but that he was so full of them, and so earnest in them, and made such glowing and successful statements regarding them, that he set other persons experimenting, observing, and noting its effects.

Dr. Fountain, in his own ardent hopes and imaginations, had found a *specific;* and he died a martyr to a theory upon which he had built a magnificent structure, but it was without a foundation, and it fell; as the light burns brighter in this gas, so does the light of science become brighter by his martyrdom. He was no less ardent for his theory, and his remedy for the cure of phthisis, than Churchill is for his hypophosphites. They were both earnest but honest hobby riders.

But Dr. Fountain laid claim to the discovery of the use of this remedy for mercurial ptyalism; is he entitled to this claim? He also claims to be the originator of its use in phthisis. He says, "I endeavored to establish the theory * * * * of rendering the blood more highly arterialized through the agency of chlorate of potash," and "I have formerly ventured the prediction that it would be found a valuable remedy to arrest the development of tubercles."

Some may perhaps ask, What does it matter who discovered a new fact, or gave to the world a new application? He who would ask this question is not animated by the same aspirations that have been one of the means of sustaining many of the noblest minds in all ages, through sickness, poverty, and neglect. There are now among our priesthood, as there have been in all ages, honest, enthusiastic delvers after scientific truths, and all they ask or expect for their labors is, that their discoveries may be of benefit to mankind, and that their merits may be acknowledged and appreciated.

> "Leaving here a name, I trust,
> That will not perish in the dust."

We are not all of Falstaff's opinion. You perhaps remember his soliloquy, "Honor pricks me on—What is that honor? Air, a trim reckoning! Who hath it? He that died o' Wednesday! Doth he feel it? No! Doth he hear it? No! Is it insensible then? Yea, to the dead! But will it not live with the living? No! Why? Detraction will not suffer it, therefore I'll none of it."

Let us render to every inventor and scientific investigator the same justice for the riches of mind that he has left behind him, that we do to the distribution of his money by his will. Dr. Fountain was an ardent and enthusiastic searcher after knowledge. He made himself a martyr to the cause of science, and the article by which he lost his life will for ever be associated with his name, and when it is spoken of his melancholy end will be lamented. But his claims to the discovery of the uses to which he applied KO, ClO_5 do not belong to him. Prof. G. B. Wood, in the first edition of his Practice of Medicine, which was I believe issued in 1847, four years before Fountain dates his discovery, in speaking of the treatment of mercurial stomatitis, says, "The internal use of chlorate of potash has been recommended as highly useful, though requiring caution," and he refers as authority to the January number of the *American Journal of Medical Sciences* for 1844. M. Herpin and Blache employed it and recommended it for the same purpose in 1855, Ricord in 1856, Gallier in 1857, whereas Dr. Fountain has given no record of its use prior to 1860.

As to its effects in phthisis, and for which Dr. Fountain claims originality, and considers it almost a specific, we find in the London *Lancet* for 1836 that Köhler tried it in 1833 very extensively (in twenty-five cases) in the same disease and much in the same manner, without experiencing benefit from it. Dr. Garnet tried it to restore the deficiency of oxygen in the system in scorbutic affections (see Duncan's Annals of Medicine, 1797). Copland, in his Medical Dictionary published in 1840, recommended it in bronchitis, and adds that "Mr. Murray, in a recent publication, states that he has employed it successfully in consumption." Dr. Fountain said in his paper, "I believe tubercular deposits to be the result of an imperfect elimination from the system of the products of organic decay of the tissues of the body." And again, "It will be observed that the treatment of phthisis here recommended is based upon a peculiar theory of the pathology of this disease, namely, that the deposit of tubercles results from an imperfect elimination from the system of the products of organic decay of the tissues of the body," *American Medical Monthly*, Sept., 1860. In the same journal, the *American Medical Monthly* for Jan. 7, 1856, Dr. O. C. Gibbs says, "Many eminent names in the profession have recently taken a different view, and now consider it (tubercle) an excrementitious product derived from the waste of the tissues or the oxidation of the blood." Dr. Gibbs in the same paper again remarks, "that if the material from which tubercle is formed reverts to the blood from the waste of the tissues, then its superabundance is an evidence of increased oxidation, and waste of certain elements of the body, or of deficient elimination of this excrementitious product." You will observe that Dr. Fountain's views correspond with those previously stated by Dr. Gibbs, but Dr. Gibbs does not claim them as original with himself; he is but ably stating the opinions of the day as held by the minority in contrast to those of the majority.

We see, then, that Dr. Fountain's high expectations of the great value of KO, ClO_5 in phthisis, are not likely to be realized; for others who have preceded him in the same views, have experienced but little benefit from it, and those who have followed up his experiments have met with but little success. It is a strange fact, but we daily learn over again the same lessons, and many of us let them slip as quickly from our memories. Theories, and systems, and medical agents are brought forward, and have their day, and are for awhile the fashion; but when common sense reviews these claims, they soon assume their proper level. Time passes by, and another mind, reasoning from the same deductions, takes up the same remedy with the same earnestness, and again it become the fashion, and is again forgotten except by those who use it for its legitimate purposes. The thing occurs again and again, and the last man who vaunts it, through his imperfect investigation of medical literature, is equally honest with the first, and supposes he has made a most valuable discovery. Dr. Fountain has shown no more Quixotism in mounting his hobby, than Dr. Churchill has shown in riding his; but let us take a lesson from their experience.

You will ask me, then, what are the therapeutic applications of KO, ClO_5?

Do you remember the experiments of O'Shaughnessy, that I related, and do the facts here given suggest no applications to you? An article which produces such an effect upon the blood must have many useful applications. We saw in these experiments, that an animal that was nearly dead from administration of poisons which injured the quality of the blood, was quickly revived by this remedy, administered in the way in which it acted most energetically and expeditiously, namely, by injection into the veins. And we saw that in a short time the salt had a diuretic effect, causing the urine to pass copiously, and that some of it was detected unchanged in this fluid. Would it not produce the same results in the human species, in poisoning by the inhalation of the gas of CO_2 (carbonic acid), HS (sulphuretted hydrogen), HCy (hydrocyanic acid), and could it not be successfully applied in the recovery of drowned persons? The diseases in which of late years this remedy has been most successfully employed, are diphtheria, and ulcerative or gangrenous sore throat. In diphtheria, it has been probably used more largely by Professor Jacobi than by anybody else, though latterly he has used NaO, ClO_5 in preference to KO, ClO_5, not only on account of its greater solubility, but because, as he informs me, it is more mild in its effects. In these diseases, it is used not only as a wash and gargle to the mouth and throat, but it is also taken internally in considerable quantities. Whether it acts, as has been so repeatedly asserted, by giving up a portion of its oxygen to the blood, I will, after what you have heard, leave you to decide; but we do know that it is not all decomposed, as some of it is found in the urine, saliva, fæces, and sweat unchanged. Professor Tully and other eminent men reject the theory that it imparts free oxygen to the blood. It is my opinion that it acts rather by its unity as a saline, possessing its own peculiar action, than by decomposition. That it produces a florid color to the blood without being decomposed, we have abundant proof. There are symptoms in typhoid fever that are much relieved by its careful exhibition. When, in this disease, the urine is found to be scanty and high-colored, with the brain dull, owing to this scanty secretion, this remedy given in moderate doses, freely diluted with water, for twenty-four or forty-eight hours, will generally be found to give great relief by its restorative and diuretic action. I have seen it of great service in cases of scurvy, where the gums and lips and skin were of a livid color; and it may have acted in the manner that Dr. Garrod asserts that these salts act—by supplying potash to the blood; and if it acted in this way, it must have been decomposed. It did act as a free and efficient diuretic. In mercurial stomatitis it is a very successful remedy, both as a wash, and when taken internally, but it is not by any means a specific. In syphilis, it has been found of but little service. On the whole, it is perhaps the best remedy we have for buccal inflammations and for ozœna.

It is an interesting question to ask, but one which has yet to be answered, What is the difference in the therapeutic effects of KO, ClO_5 (chlorate of potash), NaO, ClO_5 (chlorate of soda), KO, NO_5 (nitrate of potash), NaO, NO_5 (nitrate of soda)?

When taken in any considerable dose, it depresses the heart's action, frequently reducing the pulse twenty or more beats in the minute; this it does by its refrigerant and antiphlogistic powers. That it possesses tonic properties as claimed by Fountain, and others before him, is entirely out of the question, excepting so far as its base may serve as a restorative hæmatic.

In what manner does KO, ClO_5 act, when taken in small, or medicinal doses; and what are its effects and modus operandi when taken in inordinate doses? We have seen by the experiments of O'Shaughnessy, that it brightens the color of the blood; that it revived animals when poisoned by medicines that acted on that fluid; and we have seen that a part of it, at least, traversed the system, and passed from it in the same state in which it entered it, thus producing its effect by its unity, not by decomposition. We have seen, again, by the experiments that I related to you, that in certain states of the system decomposition does take place, and that both base and acid are used for the reparation of tissues, and that this decomposition takes place only so long as it is needed as a restorative hæmatic; and that as soon as the system is saturated with it it appears in the urine, and after awhile passes off also by the bowels. We learn, also, from the large experience of Professor Jacobi in the Dispensary, that it is the best remedy we at present possess for the various forms of inflammatory sore mouth, both when used as a wash, and given internally; and that though it frequently fails to afford relief, it is one of the best remedies in diphtheritic exudations, and in mercurial ptyalism. The latter fact is verified by the previous experiments of Herpin, Blache, and Ricord. That it is no *specific* in phthisis, and, in fact, that it frequently does injury in that disease, we learn from the observations of Köhler, Flint, Gay, and others.

As to its effects in large doses, we see that it may even be fatal, and that death may be produced by its action on the kidneys, and upon the stomach and bowels. In the cases related by Tully, in which one ounce was taken at a dose, there was a great uniformity in the symptoms produced. In one instance, in one hour after taking an ounce, the pulse fell from seventy-two to fifty-six, and was considerably smaller and weaker, and in five hours the pulse had fallen to thirty-six. It produced, also, a severe, heavy, and oppressive pain in the stomach and bowels, with free and painful alvine evacuations. Even on the second and third days this severe and oppressive pain was experienced, and was only relieved by large doses of clear brandy, and excessively large doses of opium. If the opium was omitted, the pain returned, of a lancinating and sore character, with intolerance of the slightest pressure. The violence of the symptoms passed off after a copious diuresis, but it left the person with flatulence and other dyspeptic symptoms, which lasted for some time. The treatment in these large doses should be large quantities of warm flaxseed tea, the hot bath, and blistering with ammonia over the kidneys, with large doses of opium and ipecac.

Professor Jacobi has kindly furnished me a most elaborate culling of the German journals, on the effects and uses of this salt, and I am very sorry that I have not time to present these interesting notes to you, especially as Professor Jacobi's own very extensive experience with the salt has enabled him to make an excellent selection of what was worth mentioning. I hope to give you a collation from these notes at a future time. Dr. Jacobi's individual experience with this remedy is perhaps more extended than that of any other person amongst us; for in the German Dispensary, his clinic, and private practice, I find he has notes of its administration in about two thousand cases, and, as I have before said, he uses it to a great extent and with good success, both internally, and as a gargle and wash, in the various forms of stomatitis. In mercurial stomatitis, Dr. Jacobi amply verifies Ricord's experience, and has met with almost unvarying success in keeping off salivation. From the first day of a mercurial treatment for syphilis, he has given KO, ClO_5 or NaO, ClO_5 in drachm doses, without any abatement of the effects of the Hg (mercury), and no salivation, even where the Hg has been given from four to six weeks. Dr. Jacobi informs me that about three years ago he took two ounces of KO, ClO_5 in divided doses during two days. During the first day, there was nausea during the whole time, the urine was increased, free salivation all day, slight diarrhœa, and loss of appetite. During the second day, the nausea was more intense, a constant spitting, a very sore feeling in the intestines, diarrhœa increased, with general uneasiness and irritability; he was not fully over its effects for several days. But Dr. Jacobi says there are but very few to whom he would give this dose. As to its detection in the secretions, Isambus found it in the saliva five minutes after taking it, in the urine in ten minutes; he found it, also, in the milk, tears, nasal mucus, and perspiration, but not in the fæces or semen.

Original Communications.

CRITICAL REMARKS ON THE DISEASE OF COUNT CAVOUR, AND ITS TREATMENT.

By STEPHEN ROGERS, M.D.,

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The subject of the untimely demise of the great European statesman, Count Cavour, and of the professional discussions *pro* and *con* upon the medical management of his fatal disease, have been worn well-nigh threadbare by both the medical journals and the newspapers all over the world.

Europeans, perhaps, have come to some conclusion satisfactory to themselves in the affair; and the profession on this side of the ocean, very likely, have, as a general thing, concluded that at this distance and with the indefinite accounts received, we have little data for a well-founded criticism upon the professional behavior of the Count's physicians during, and of their scientific treatment of his last illness. I confess to have been one of this generality up to the time of the appearance in your journal, of the translated clinical report of Count Cavour's last sickness and death, from *L'Union Médicale*, by Dr. Deslandes. To the American physician, particularly if he have seen much of miasmatic disease in the topical regions of this continent, or in those sections bordering upon the tropics, and to the young men who are just starting in their career, and who may be thrown into these regions, this clinical, and as stated *reliable* report, must, it appears to me, prove a very curious, interesting, and—as I hope to make it—a very instructive and useful one. Let us commence then with the first important point touched upon by the report, viz. the habits of life and occupation of the patient. His mental labor, it is stated, had been for many years excessive, particularly during the last two years, a manner of life well known to be inconsistent with a high grade of animal vitality; and a fact which should have had more respect shown it by the physicians who treated his disease. With this preparatory information, it is no matter of surprise that gout should have troubled him occasionally, nor that he should so long ago as six years prior to his death, have had so much trouble to get rid of an intermittent fever as the report states he had. The fact of his not having suffered any "serious or long disease," cannot necessarily interfere with these conclusions, for one's *vis medicatrix naturæ* is not by any means shown by a long exemption from disease, irrespective of circumstances.

Expose an individual to causes of disease, to which everybody about him, as a rule, yields, then if he escape, it is very safe to accredit him with an extraordinary amount of vital protective force, or in common language, with a fine constitution. Count Cavour, so far as we know, was never thus accredited. On the contrary, we have the statement, that he threw off disease badly, in the history of his long battle with the intermittent fever of six years before. This is the most reliable means of estimating vital force and strength of constitution, viz. the promptness with which disease is thrown off, and with which the system recovers from its effects. With the light of these truths before him, any observing physician could not but have taken the patient in question, as a case requiring cautious and perhaps sustaining treatment, rather than the routine medication and haphazard depletion which we shall see he was subjected to. We now come to the—strictly speaking—commencement of the disease, which finally terminated so unfortunately, viz. the frequent attacks of colic, which are said to have troubled him for about a year prior to his final colic, which we shall hear more of presently. Although purporting to be a clinical record of what actually took place, a more indefinite, objectless, and unsatisfactory collection of words, cannot be conceived of than this paragraph. Absolutely nothing of import is communicated, except perhaps that he had little confidence in his physicians, which we may yet see reason for thinking was not at all strange. We are told that "for about one year he had been complaining of very sharp colics, coming on at night usually, and which *he* treated by *one* or *two* bleedings." Not a word is said of the accompanying symptoms; if there were headache, febrile state of the skin, peculiarity of the pulse, coolness or blueness of the surface; or if these attacks passed off without either heat or perspiration, or if they observed any kind of periodicity in their nocturnal attacks. And if so, whether they were quotidian, tertian, or quartan attacks; nor of the intervals between the attacks. But fortunately, a little further on, we find what may help us to a solution of the doubtful points. "On the 29th of May," says the report, "in the evening, he was *again* seized with colic." This expression leads us to the conclusion, that this seizure was not unlike, if it was not precisely like the previous ones, which we have just seen he had suffered for a year, more or less. Here also we are left in complete ignorance as to any attending phenomena of the colic, if there was any headache, any peculiarity in the condition of the skin, pulse, or temperature. Almost as if by accident, we are finally told, that some time the following day "*the fever being intense, it was thought necessary to bleed him again* TWICE."

After the bleeding, which had now been practised three times since his attack of the previous evening—and which really seems to be the object of the report to record—we know nothing of his symptoms, till the morning of the 31st, at least thirty hours after his seizure by the colic. It may have been thirty-six hours. He was then, in the language of the report, with the "apyrexia complete." Here also occurs a statement, which fixes in my mind a deep conviction that the Count's physician, however meritorious a man, was utterly worthless to him as a medical adviser. It is this: "M. de Cavour, thinking himself cured, acted accordingly." I also take it as giving another key to the hidden history of his previous colics. It seems to say that he had suffered similar seizures frequently, and they had terminated as this had, and as the probabilities of a recurrence—judging from his previous experience—were considered slight, he discharged his physician, or what amounts to the same thing, refused to be governed by his advice.

I submit the opinion that there is the best reason for believing that his previous colics had been more or less like this one, during the whole year before, and that the case up to the 31st of May, had been nothing else than an irregular and more or less marked intermittent fever. From the fact that after all this fever of the night of the 30th of May, no medicine was prescribed that we have any account of, nor any recommended, I am forced to the conclusion, that up to this date the Count's physician did not comprehend his patient's disease, or if he had an inkling of its true character he was overruled by, and very culpably submitted to the opinions and will of his illustrious patron. We are not told if his physician had even seen him in any of his previous attacks of colic, which one or two bleedings are said to have always cured. However this may have been, it is scarcely credible that he could have attended a patient so intelligent as this one, through such an attack as was experienced on the 29th and 30th, without making the discovery that he had frequently suffered similar ones. But if with all this history, and this last day's experience, the case was not understood by him, and he was unable to make anything out of it, his responsibility is somewhat lightened, for after all it is hard to blame one for the mismanagement of a thing he does not understand. But if he did comprehend the facts in the case, and still gave his assent to what he must have known were erroneous and dangerous notions of his patient, he is in a high degree censurable. His course was plainly to have resigned his charge, as soon as his patient refused to be governed by his important instructions. As to the real character of the colic, so much spoken of, the probabilities are very strong, judging from all the circumstantial evidence we are able to collect, that it was simply *gastric* pain, not by any means an unheard of attendant on, and sometimes takes the place of the cold stage of intermittent fever. Whatever may have been the facts previously, we now see that it is no longer possible to mistake the character of the Count's disease, for on the evening of the same day, the 31st, in the morning of which he considered himself cured, a period of forty-eight hours from his last seizure by colic, we are informed that "*a new attack came on with reaction towards the brain.*"

All that we have thus far gone over, is equalled in indefiniteness, unscientific looseness, and downright stupidity, only by this statement. What do we learn by it? That he was attacked again by colic? That he was taken with chill? That he was seized with delirium? Or that he had any of the early or later symptoms of intermittent fever? To all this, the report only replies, "the abdomen was painless on pressure," and that at his *own* request the patient was bled. Whether the reaction spoken of means to say he suffered headache, or was delirious, it is impossible to say; but if the former, it was precisely what might have been expected after so many bleedings; if the latter, he certainly was in a very unfit condition to give so important directions, no matter what his medical education may have been: so that in either case, his physician was again guilty of a dangerous inefficiency, in not having been governed by his own judgment, which, thus far, we have not seen that he was, in a single instance. At this stage of the drama he was bled twice again, and then nothing more is said of him for thirty-six hours more or less, when we are told that during all that period he had not slept. Had he been delirious during a great part of this time? How many hours of it had his fever been intense? What remedial measures had been employed besides the bleeding? No reply to any of these inquiries; but the probabilities are strong certainly, that, what with his exhausting bleedings, and his depressing miasmatic disease, he must have been, a part of the time at least, in a condition bordering upon asthenic delirium, if he was not absolutely crazy. The next therapeutical proceeding recorded is "an injection;" but for what purpose it was given or of what composed, we know as little as if it were not mentioned at all.

It now for the first time appears that the physician suspected there might occur another paroxysm, or, as it is termed in the report, "an exacerbation," a singular name, by the way, for a paroxysm, for we are told in the context, as plainly as it would seem possible for this reporter to tell anything, that another paroxysm did come on the following evening, and that the patient was free from fever through the day.

Here for the first time, after two severe and long paroxysms, we learn that treatment was commenced. In reply to the query put in the report, "Could this treatment have been commenced too late?" I would say, that *treatment* should have been commenced much earlier; but even at the time mentioned, I do not think the case was by any means desperate, had it been attacked in an efficient manner, which was by no means the case. The doses were entirely inadequate, and given in a most routine empirical manner. I cannot better illustrate the different results obtained from quinine, administered in the doses given to Count Cavour, and those obtained from such doses as experience the world over has shown proper, than by quoting the written report upon this point, of one of the Surgeons of the U. S. Army. He says, "some two years since I was so unsuccessful in arresting the paroxysms of intermittent with the sulphate of quinine, given in two grain doses every hour (although during the apyrexia as much as twelve, eighteen, or twenty-four grains had been given) that I laid it by in despair, and resorted to sedatives and relaxants, such as tartrate of antimony, ipecac, opium, etc. Still, however, I was not satisfied, and the great reputation the Peruvian bark had so long enjoyed, created doubts as to the propriety of abandoning its use. Soon, therefore, I determined to give it another trial in larger doses, and with this view I commenced three or four hours before the expected paroxysms, and gave from four to six grains every hour until it produced its peculiar effects upon the brain—ringing and buzzing sounds in the ears, a sense of stricture across the forehead, and temporary deafness—effects invariably produced in every case where three or four such doses had been given. From this time forward I was constantly successful, nor do I remember a case in which it failed, when the peculiar effects it displays on the nervous system were produced. Finding, then, that the enlarged doses had such happy effects, I was induced in many cases, when the apyrexia was short, to give it in single doses of from ten to fifteen or twenty grains, according to the violence of the disease. Here, then, I saw cases of intermittent fever that could not be arrested by fifteen or twenty grains of sulphate of quinine, given in small and divided doses, yield immediately to the same quantity given in larger doses at much shorter intervals."*

As to the comparative activity of the citrate and sulphate of quinine, I have never taken the pains to determine by experiment, but can see no reason why there should be any perceptible difference. But whether there be or not, is unimportant in this particular case, for Cavour did not take enough, had it been the *sulphate*, to produce any results. The gentleman above quoted utterly failed to break up paroxysms with it, given at the rate of two grains every hour; but the Count took of the first prescription only two and a half grains every two hours, really about one-half the amount. Later we are told that it was prescribed in five grain doses, but as it was so timed that he could take only one dose before the beginning of another paroxysm, it turned out to be useless, and the whole fifteen grains were thrown away. There is another singular circumstance brought out in this record, viz. that the patient never had *chills*, till some hours after he had commenced to take the quinine. This, for all the world, looks like a case made up to suit the medication.

However, he had a chill, at last, of an hour's duration, followed by fever which lasted for twenty-four hours, more or less intense, attended with delirium. Here we have a positive declaration, that in *a state of delirium* the patient insisted on being bled, and accordingly *was* bled for the sixth time. If this is a veritable statement of what occurred in the sick-room of this patient, more convincing evidence of the imbecility of Count Cavour's physician can hardly be conceived.

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* Medical Statistics U. S. Army, 1839 to 1854, page 688.

Should I go on in this order of examination, little else than a repetition of the same puerile proceedings could be found throughout this most extraordinary clinic. We will not, therefore, spend more time with what was done or said to have been done, but proceed to consider what might and should have been done. Well may the author of this clinical report ask, "Now what was the disease?" If the Count's physician made up this report, he can hardly be charged with want of ingenuity, for a more ingenious mystification, and evasion of the main points in the case, would be difficult to match in the annals of either medicine or law, both so famous for this species of dodging. But with all the apparent effort to make a report, and say nothing, enough has forced itself into view to enable one who has seen much of miasmatic disease, to satisfy himself that the Count's disease was an *intermittent fever.* First, six years prior to this last illness, he had suffered much from, and was a long time getting rid of, an intermittent fever. This fact alone should facilitate greatly the diagnosis of any subsequent disease, having anything like a periodicity, as was doubtless the case with the colics of this patient, which we are told were particularly troublesome for the last year of his life. I have already given my reasons for believing that these colics had invariably been attended with fever. Second, about two weeks prior to his final illness, he had exposed himself for some days to great heat of sun in riding over his country estates, and—although nothing is said of it—probably to miasmatic exhalations. For a week or ten days after his return from this fresh exposure "he was observed," says the report, "not to be so well as usual, and more irritable." This moral condition is a most common premonition of miasmatic fever, as well as an accompaniment of the incubation (if this term may be employed) and development of miasmatic disease. Third, on the night of the 29th of May, he was seized with one of his *accustomed* colics, which terminated in fever followed by distinct apyrexia, as we have seen. Forty-eight hours after, another paroxysm set in, ran its course, and was followed at the same interval by a third, setting all doubts as to its character at rest, even in the minds of his tardy physicians, who it appears did not commence their trifling medication till he had suffered two severe paroxysms, and had been bled five times. Had the patient, on the morning of the 29th, when seized with colic as it is called, been ordered into hot water to the knees, and opium sufficient to relieve his gastric pain, with acetate of potash, or spirits of nitre, or small and frequent doses of ipecac, to induce and promote perspiration, the hot stage of the paroxysm would, without the least doubt in my mind, have been curtailed to less than six hours, while the various bleedings so reduced the vital forces, that his brain was desperately at work for twenty-four hours, battling with the disease, and restoring the system to a normal state.

As to the amount of blood taken, we are quite as ignorant as on any other important point in this most dubious report. But whether much or little, I do not hesitate in declaring, that every drop taken, did the patient injury. Plethoric butchers may occasionally be bled in miasmatic fever without danger, but a man of the age, the habits, and the brains of Cavour, loses blood badly in these diseases, at great expense of vitality, and much at his peril. At the commencement of the apyrexia on the morning of the 31st, or even after the second paroxysm, and all of the bleedings, on the morning of the 2d of June, as soon as the skin began to feel moist, which, by the way, I believe is not mentioned in the whole report—ten grains of quinine in solution should have been administered, and repeated hourly till his ears rang, or till he showed some other evidence of being thoroughly under its influence, and then should have been kept so for at least forty-eight hours, by a dose once in five or six hours of sufficient amount.

Here I wish to remark, that my very extensive experience in the use of quinine has convinced me that the theoretical administration of it, in small and repeated doses, for the object of saturating the system, and thereby expelling, or neutralizing, or destroying, the miasm, is an unreliable, generally useless, and dangerous practice, in districts where there exists much intensity of miasmatic poison. A dose of quinine so small that it produces no sensible influence or impression, is not to be depended upon either as a preventive or curative. The quantity requisite to produce this effect, is variable, from ten grains down to three. As a general rule for adults, four or five grains will produce it (if given in solution), but if not, it should be repeated in the course of an hour. It seems hardly requisite to say, that when a prompt action of this agent is required, it should be given in solution. Quinine is not a cumulative medicine. Its effects are about as transitory, and it is eliminated from the system with as great facility and rapidity, as a dose of alcohol. Hence, if the indications of its influence upon the brain—such as buzzing in the ears, etc., are established, and allowed to pass off, before the hour for the commencement of a new paroxysm, it will rarely do any good. I have repeatedly, in my own person, failed to arrest premonitory symptoms of miasmatic fever—such as pains of the extremities, loss of appetite, restless nights, slow digestion, etc., for two or three days in succession, by the occasional use of a moderate dose—say four or five grains—which at once disappeared, the moment my ears began to ring from a double dose. I have never seen any reason to believe in the chemico-therapeutic doctrine, that the presence of quinine in any quantity, and miasmatic poison in a state of activity, cannot at the same time exist in the system; that the quinine neutralizes the poison, in some inexplicable chemico-vital manner. It exerts its medicinal power, by simply stimulating the brain to a more or less healthy vital action, of resistance, restoration, and preservation. Hence if it be not administered in amount sufficient to produce effects appreciable by the senses, it will, as a rule, be worthless in the treatment of intermittents. From this belief, which I have not settled down in without ample evidence, comes my opinion, that if Cavour, on the morning of the 31st May, had taken ten grains of either citrate or sulphate of quinine in solution, and if his ears did not, in the course of an hour, begin to give indication of its action, repeated the dose, and so on, till he *had* unquestionable evidence of its action on the brain, and had kept up such action, by occasional doses, for two days; notwithstanding the three suicidal bleedings he had already suffered; his disease would have been cured, or at least that he would have recovered from that attack, and his country be spared her loss. At the approach of the hour for the paroxysm, which in order would have come on the 4th June, it would have been prudent to take another ten grains for safety. It is always safe practice in miasmatic disease, to particularly respect the first and second regular periods, after the one he has been carried over by the antiperiodic, and to show this respect, by administering a good dose, of from five to ten grains, two hours in anticipation of its arrival.

Intermittent clearly, and simply in the beginning, Cavour's disease, by repeated bleedings, and by the exhaustion of vital force, produced by the successive uninterrupted paroxysms of a violent fever, was converted into what the reporter calls *ataxic*, attended very naturally by the delirium of exhaustion. Hence we see, that during the remainder of his existence, after the sixth bleeding, he was more or less constantly delirious. It was in almost every particular a case of what in this country is known, or supposed to be known, by the name of Panama, or Chagres fever. The main point of difference is, that in his case vitality was exhausted by *bleeding* and fever, while in the latter it is reduced by the influence of tropical *heat*, and fever. The suggestions as to the treatment that should have been employed, both in the paroxysms and to prevent them, in this case, are an expression of the conclusions arrived at, from an extensive experience with this last named fever.

If these remarks and opinions, frankly given, result in throwing any light on this—as already stated—nearly worn out subject; and especially if they are ever of any service to the young physicians, who are annually going forth from this country to all parts of the world; my wishes are attained. I desire to impress them with the fact, that next to ignorance, comes inefficiency in administration, and that if they get patients whom they cannot control, it is much better for their professional reputation, and peace of mind, to resign the care of them, than to be dragged by them into discredit, and perhaps infamy, for an act which may be the fruit of ignorance or indiscretion, on the part of the patient, if assented to by the physician, who understands the dangers attending it may render him highly censurable, criminal, or even infamous.

Count Cavour is past recovery; let this example serve as a lesson for future reference, to all whom it may interest.

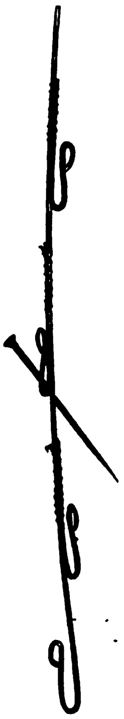
New York, Nov. 18th, 1861. 42 W. 29th St.

PINS IN THE ŒSOPHAGUS.

By J. W. RIGGS, M.D.

NEW YORK.

So long as the habit of substituting the *mouth* for the *pincushion* prevails, the surgeon will be called now and then to dislodge these little indispensables from the œsophagus—for such persons, of course, seldom take the precaution to swallow pins head-foremost. However easy to the surgeon, in such a case, to force the intruding body downwards, it is at least disagreeable to the patient, and always far more satisfactory to all parties to effect its extraction; and this is not so readily accomplished in all cases either by emetics or by the use of forceps.



Having some twenty years since been called to a lady in this predicament, in whose case several ineffectual attempts had been made by the means mentioned, an instrument, which is well represented by the figure here seen, was improvised for the occasion, and answered the purpose admirably, by bringing the pin into view with the first introduction of the so-called *pin-hook*. Since the time mentioned a similar contrivance has been employed with like results in some half-dozen instances, and without the least discomfort to the patient or inconvenience to the operator. A piece of common iron (or any other) wire, a foot or more in length, and as nearly as may be of the thickness shown in the wood-cut, with a pair of dressing forceps, found in the pocket-case of every practitioner, and a waxed thread, suffice for the construction of this instrument, while the time required for making it need not exceed a very few minutes; so that the surgeon, whether in city or country, is always prepared for any emergency of the kind, and may be perfectly confident of success, for it would be difficult to pass the instrument below the pin and withdraw it without securing the object.

In making an instrument of the kind, the upper end of each hook should be so curved or rounded over as not to engage in the tissues in its passage either inward or outward, and the space between the returned end of the hook and the body of the instrument should be such as to receive the body of the pin without admitting the passage of its head. The lower hook may be formed of the main wire, and the additional ones of separate pieces of suitable length and secured upon opposite sides by means of common thread as represented. The number of these hooks is of course optional with the surgeon, though from three to four or five are believed to be preferable to any lesser number.

Reports of Societies.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, *November* 22, 1861.

Dr. James R. Wood, Chairman.

THE RELATION OF THE INSERTION OF THE CAPSULE OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

Dr. George K. Smith, of Brooklyn, having at a previous meeting read an elaborate and interesting paper on the "Insertion of the capsular ligament to intra-capsular fracture of the neck of the femur," opened by appointment the discussion upon it by reviewing the whole subject briefly as follows:

In opening the discussion I propose to mention, briefly, some of the reasons, why different surgeons, equally honest in their search for truth, and equally competent to judge of the points at issue, have hitherto been so much at variance in the investigation of this subject; and afterwards read the summary of my paper.

The *first* of these reasons is, that different surgeons have located the posterior insertion of the capsular ligament at different points, some at the middle of the posterior surface of the neck, some as far remote as the shaft of the bone, and others at all points intermediate between these two extremes; so that a fracture, located three-fourths of an inch distant from the posterior inter-trochanteric line, would, in the opinion of one surgeon, be extra-capsular, while, in the opinion of another surgeon, it would be entirely included by the capsule. *Second,* surgeons have not seemed to be aware of the fact, that the insertion of the capsular ligament is removed by the morbid changes which occur as a consequence of the fracture. This circumstance has given rise to the following difference of opinion. The surgeons who have made autopsies after union of a fracture of the neck, have found the line of union included by the capsule of the specimen, even after the removal of the entire neck by absorption. In this circumstance they have found (as they supposed) positive evidence that the fracture, and its subsequent union, were intra-capsular. Having determined this point, they have macerated the specimen to prove that the bond of union was composed of bony material; and when, after maceration, the bone has been viewed by other surgeons, some, finding the line of union close to the shaft of the bone, believed it to be intra-capsular; while others, who found the line of union equally close to the head of the bone, interpreted its proximity to the head in favor of an intra-capsular fracture. Mr. Jones's case furnishes a fine illustration of this difference of opinion. Mr. Jones states that, "On dissection, the capsule was found very much thickened, and it was not until the shaft of the bone was divided that the knife could be passed around the joint, so contracted was the space between the trochanter major and the edge of the acetabulum. The direction of the fracture could not be traced, or the bond of union made out, until the bone had been macerated. As portions of the capsule became loose, they were removed by the forceps, which enabled me to discover, what I believe to be the case, that the fracture occurred entirely within the capsule." After maceration the bone was presented to Sir Astley Cooper for inspection. He was of opinion that "the fracture was in part within, and in part external to the capsular ligament, in part united, and in part not, and the neck of the thigh-bone absorbed."

The following is Mr. Stanley's history of Jones's case:—"The history of the case is clearly that of fracture of the neck of the femur; the appearances of the bone show that there has been a fracture which has reunited by an osseous medium, and the direction of the fracture is such as, in my opinion, can permit no doubt that it was confined to the portion of the neck of the bone covered by synovial membrane; consequently, that it was wholly within the capsule. The fracture extends through the basis of the head of the bone in the line of its junction with the neck. As in other cases of the same kind, a great part of the neck has disappeared, and in consequence the head is proportionately nearer to the trochanter major and shaft of the bone; *its reunion has*, in fact, taken place in part to the remaining portion of the neck, and in part to the shaft."

(Dr. Smith here exhibited a plate representing the posterior surface of the specimen taken from the *Medico-Chirurgical Transactions*.)

The following are the conclusions to which I have arrived as given in the summary of the paper:—

First—The insertion of the capsular ligament of the hip-joint varies so greatly that scarcely any two specimens of the normal capsule taken from different subjects can be said to be inserted into the neck of the femur at the same point, and so wide are the differences seen, that, if a transverse fracture of the neck of the femur be located at a given distance from the posterior inter-trochanteric line, it will be found to be entirely included by the capsular ligament in one specimen, and on the posterior and inferior surfaces of the neck, half an inch or more external to the capsule, in another; hence it is impossible to determine the precise location of capsular insertion by measurements of the neck of the femur, after the removal of its capsular ligament; and it is also impossible to indicate the line of capsular attachment, by comparing the dried bone with a specimen taken from another subject, to which the capsule still remains attached.

Second—The descriptions of the insertion of the capsular ligament given in our works on anatomy, are even more widely at variance than the differences seen in nature. Some locate the posterior insertion of the capsule at the middle of the posterior surface of the neck, some at the posterior inter-trochanteric line, and others at all points intermediate between these two extremes; hence if fracture of the neck of the femur occurs at any point between the head of the bone, and the posterior inter-trochanteric line, we can find authority among anatomists for believing that the fracture is intra-capsular; and it will be observed that notwithstanding the extreme diversity among our authors in describing the insertion of the capsular ligament, *not a single one even intimates that it ever varies from the position which he himself has assigned to it.*

Third—The insertion of the capsular ligament is often removed by the morbid changes consequent upon fracture of the neck of the femur; therefore, the capsule of the fractured bone cannot be said to furnish reliable evidence that the fracture was within the normal capsule. The normal capsule is usually inserted into the middle of the posterior and inferior surfaces of the neck; in some instances a little nearer the head of the bone than this point, and in others more remote, *but never as far distant as the shaft of the bone;* while the capsule of the fractured bone is often found to have its insertion into the shaft, the entire neck of the bone having been removed by absorption before union occurred. Dr. Smith here exhibited, in illustration, one of Prof. March's specimens, in which the morbid capsule had its posterior insertion into the shaft of the bone.

Fourth—The capsular ligaments of the opposite femurs of the same subject, are exactly alike in their insertions into the neck of the bone; hence if the surgeon who makes an autopsy after union of fracture of the neck of the femur, removes both hip-joints, the insertion of the capsular ligament of the sound femur will show the normal insertion of the capsular ligament of the fractured bone, and a comparison of the two specimens will determine at once whether the line of union in the given specimen be altogether within the normal capsule.

Fifth—The line of union in a given specimen of fracture of the neck of the femur, cannot be said to indicate the exact position of the line of fracture, if the neck suffered loss by absorption before union occurred; since it is impossible to determine that the loss of structure was entirely at the expense of either fragment of the neck. Some surgeons have recorded as examples of bony union of intra-capsular fracture cases in which the neck was completely removed by absorption, and the head of the bone closely united to the shaft, and have claimed in these instances that the neck was fractured close to the head of the bone; while other surgeons, who also regarded the line of union as being identical with the line of fracture, have maintained that the fracture in each of the given specimens occurred close to the shaft of the bone.

Sixth—Under favorable circumstances fractures of the neck of the femur, external to the capsular ligament, unite readily by bone; so also do fractures which are partly within and partly without the capsule; and it is highly probable that fractures within the capsule, which are followed by absorption, are sometimes united by bone, after the process of absorption has reached a point external to the normal capsule, where bony material is supplied; but this, if it ever does occur, can never be proven; for if the line of union be partly without the normal capsule, it is impossible to determine that the fracture was entirely within it, and we can never be positive that bony union of intra-capsular fracture has occurred until a specimen is presented in which the line of union is found to be entirely included by the normal capsule.

Seventh—Fractures of the neck of the femur are in most instances followed by the absorption of a part or the whole of the neck; and a careful review of the cases recorded as proofs of bony union of intra-capsular fracture shows that, in the great majority of the cases, the posterior surface of the neck of each specimen had lost very much of its length by absorption, before union occurred, and that the line of union on this surface, although included by the morbid capsule of the specimen, was too near the shaft of the bone to be included by any specimen of the normal capsule.

Eighth—Fracture within the capsule is followed to a greater or less extent by disease of the different tissues which constitute the hip-joint; and the neck of the femur being very imperfectly nourished after the fracture, usually suffers great loss by absorption before union occurs, so that its appearance after union resembles that appearance of the neck which is described by pathologists as the result of an interstitial absorption of the neck, which occurs without fracture, as a consequence of old age. So closely allied are these appearances, that eminent pathologists in this and in other countries have claimed, with at least a fair show of reason, that many of the specimens hitherto exhibited by surgeons as proofs of bony union of intra-capsular fracture, have been examples illustrative of the changes produced by interstitial absorption; hence, in the further investigation of this subject, it becomes a matter of great importance that the diagnosis of fracture of the neck be clearly made out, and that it be vindicated by competent surgeons in consultation, and placed upon record in anticipation of an opportunity to complete the history of the case, it may be years afterwards, by describing the post-mortem appearance of the fractured bone.

Professor Wood has suggested that I should give a brief review of the specimens of union within the capsule which have been reported.

Robert William Smith has reported seven cases of osseous union of this fracture. Four of these cases are not illustrated by the engravings of the specimens, and their histories have failed to assign a definite location to the line of union; therefore, if we admit in either case that the bone was fractured, we have no means of determining whether the line of union was within or without the normal capsule. The histories of three of these cases are also defective in other very important points. Mr. Stanley's case does not show conclusively that the bone was ever fractured, nor does the history state that the patient was treated for a fracture; on the contrary, Mr. Stanley's history of the case shows that most of the surgeons who saw the case believed that, instead of a fracture, there was "a dislocation into the foramen ovale;" also, that the patient was treated for a dislocation. "Extension was made with the pulleys, and the limb moved in different directions, to replace the head of the bone."

In the history of Mr. Swan's case, the only evidence that the neck of the bone was fractured is found in the opinion of Sir Astley Cooper, who, however, acknowledged his inability to detect crepitus, or any other symptoms of fracture, except pain on movement of the limb, and "a slight inclination of the toes outwards."* In the history of Mr. Chorley's case, Mr. Smith admits that "a portion of the upper fragment extended in one situation a little external to the capsule;" an admission which at once excludes the specimen from the class under consideration. In each of the three remaining cases reported by Mr. Smith, the appearance of the specimen is represented by engravings which show that the posterior surface of the neck has been mainly removed by absorption, and that the line of union on this surface is too close to the shaft of the bone to be included by any specimen of the normal capsule. Mr. Smith regards these cases as examples of impacted fracture, in which the fragments have been so locked together that "they have been maintained in contact and at rest;" and states that "it is only under such circumstances that we are to hope for the occurrence of bony consolidation."† The histories of these cases state that the neck has been absorbed, and the engravings show that nearly the whole of the neck has been removed; hence the impaction which Mr. Smith considers so essential to bony union, must have been loosened by the subsequent absorption. Again, I cannot see how Mr. Smith is able to determine that the fracture was intra-capsular, after so great a portion of the neck has been removed. The line of union in each of these specimens is too near the shaft of the bone to be included by any specimen of the normal capsule I have seen, and I have taken accurate measurements of more than sixty.

Professor Mussey has reported three cases of bony union, in each of which the line of union is shown, both by the history of the case and the engraving of the specimen, to be close to the shaft of the bone; too close to be included by any specimen of the normal capsule. It is evident that he located the posterior insertion of the capsule close to the shaft of the bone, since it must of necessity be so in order to include the line of union in either of his specimens; moreover, he has reported as illustrations of intra-capsular fracture, two cases of fibrous union in which the whole of the neck has been removed by absorption.

Dr. Smith next reviewed the cases reported by Professor March. He said that as Professor March was present, he hoped to hear something interesting from him on the subject, and would be as brief as possible. He read the history of the first case, and remarked concerning the specimen, that the fracture and its subsequent union were probably within the normal capsule; that about half of the neck had been removed by absorption, and that the remaining half is attached to the shaft; also, that the head of the bone, which appears to be united to the posterior surface of the remaining fragment of the neck, is in reality separated from it by the capsular ligament, which was folded between the two fragments. He then exhibited the specimen, stating that if it were held between the eye and the gas-light, one could see through between the posterior surfaces of the neck and the head, proving that the fragments are not united in that situation, and that only the extremity of the neck is attached to that portion of the head overlapping it. He further stated, that some of the bond of union is composed of fibrous material, but could not say that it was all of that character. He however suggested the importance of macerating the specimen to settle that point. He then exhibited Professor March's second specimen, calling attention to the fact that the capsular ligament which has been preserved with the specimen, is inserted so far remote that it includes nearly all of the trochanter minor; that the history does not afford conclusive proof that the neck was fractured, and that, if ever broken, the line of union is too near the shaft of the bone to be included by the normal capsule.

He next proceeded to give an account of a case reported by Dr. Holmes, of Canton, Pa. He said that the posterior surface of the neck of the specimen had lost about half of its length by absorption, and that the line of union, as given by Dr. Holmes, was too near the shaft of the bone to be included by any specimen of the normal capsule examined by him. He said that Dr. Holmes had informed him, by letter, that "the specimen had been boiled, and sufficiently tested to satisfy all those who have examined it, of the bony union," and further, that "the capsular ligament is entire on the bone." He thought that the specimen had not been sufficiently tested in this particular; for, if the bone had been boiled long enough to separate a fibrous union, the capsular ligament could not now remain attached to the specimen. He then read the history of Professor Parker's case, and said that there seemed to be no doubt that the bone had been fractured, for the attending surgeon noticed shortening of the limb, eversion of the toes, and detected crepitus on moving the limb. He said that the anterior surface of the neck retained about its normal length, while the posterior surface had been almost completely removed by absorption, and thought that the line of union on this surface could not be regarded as intra-capsular.

In regard to Professor Post's specimen, he regretted that no history of the case could be obtained. The external appearances of the neck were strongly indicative of fracture, with bony union; the sections of the bone, however, gave no evidence of fracture; the cancellated structure of the head and neck being perfect throughout. If the bone was fractured, the line of union was without doubt within the normal capsule.

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Drinking Fountains.—The Honorary Secretary of the Drinking Fountains Association urges the necessity of introducing the fountains into the eastern districts of the metropolis. The residents in these localities are so indigent as to be quite unable to supply this simple want. In many of the densely crowded houses of the poor in these districts there are no water tanks; consequently the inhabitants are forced to resort once in twenty-four hours to places in the streets where the water is made accessible for this purpose for short periods during each day. The supply thus obtained has to be kept in open vessels, exposed to the fetid atmosphere of their over-crowded and ill-ventilated dwellings. In a short time water under such circumstances ceases to become either a wholesome or refreshing beverage. But it is often as deficient in quantity as in quality, as the poor are frequently unable to procure enough during the intermittent supply for the consumption of the next twenty-four hours. The public drinking fountains afford a simple but complete remedy for this want, yielding a constantly flowing stream of pure water, free to all. They are resorted to not only by those who seek to quench their thirst on the spot, but to fill drinking vessels for consumption at home. The Drinking Fountains Association has free grants of water, sites, fountains of all sizes, and designs at the disposal of those who will be at the cost of erecting them, but not the means to carry out anything like an efficient system. The profession, who, by the researches recently conducted on water supply and disease, was first so deeply indebted to the late Dr. Snow, can appreciate the efforts of the Association to their fullest extent, and can look on a man who at his own expense brings a fresh spring of life into the dwellings of wretchedness as one who has raised a monument to himself, which, simple as it may be, is, unlike most monuments, useful in proportion as it is perpetual.—*Lancet.*

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* Cooper on Dislocations and Fractures of the Joints, p. 157.

† Smith on Fractures, p. 64.

American Medical Times.

SATURDAY, DECEMBER 14, 1861.

TREATMENT OF INCURABLE DISEASES.

Medical men have one stereotyped complaint against the community. It is the want of faith which the latter seem to have in the power of medicines to cure diseases. This scepticism is thought by many to be a growing evil in our times, and is generally attributed to the prevalence of those heterodox systems of practice, which eschew all drugs as poisonous, at least when taken in tangible quantities. The physician, prescribing under such circumstances, is oppressed with a disagreeable embarrassment, which is seen in his hesitating course and undecided treatment. If the patient or friends lacked faith in his remedies before, they are now confirmed in their unbelief, much to his discredit and discomfort. He prescribes timorously, and often indiscreetly, and in consequence fails to prove by his works that his faith has a substantial basis. The very prejudice in the popular mind which he so deprecates, is strengthened and widened by his own conduct, and rendered seriously detrimental to his own interests, and to the position of medicine in public favor.

But is there really a want of confidence in the public mind in the efficacy of medicines? We think not. On the contrary, it will more often be found, that what at first seemed incredulity, is in fact but an overweening confidence in remedies which leads both patient and friends to resort to a larger variety than the practitioner is disposed to employ. They may thus lose confidence in the physician, or in his ability to select medicines for the individual disease in hand, but that there must be some drug all-powerful to relieve the malady, they do not doubt. A person afflicted with an incurable disease, will seldom rest in the belief that his case does not admit of cure by medicines. When he has exhausted the resources of one medical man, he immediately resorts to another, and never wearies in his search after the priceless boon—a specific for his physical infirmity.

It is an interesting question how far the medical profession is itself responsible for the prejudice of the public mind. A physician sick of an incurable disease, is generally the most intractable of patients. His confidence in the power of medicines to relieve him is often morbidly great. He cannot brook disappointment; he will not listen to the suggestion that he is beyond remedial measures. This is but the expression of that habit of mind which he has himself acquired in endeavoring to cure incurable diseases. Long experience of the utter futility of his remedies in such cases, has not weakened his confidence in the power of the materia medica to cure all human maladies. The condition of mind which the physician exhibits under such trying circumstances has, to a greater or less extent, been reacting upon the community in which he lived. With commendable heroism he has striven against hope in many a case, rather than yield to all-conquering fate. He has appealed to past experience, and has ransacked the materia medica, but all in vain. Such zeal is not lost on patient and friends. Every new pill or potion is hope renewed; but disappointment is the inevitable result; alternating thus, the disease steadily progresses to its inevitable termination. The impression created in the mind of all is, that the physician regards the resources of his art as quite equal to every emergency. If they subsequently lose confidence in him, they do not doubt the power of drugs to relieve all human ills. He may, and doubtless will, regard his lost patrons as sceptics in the efficacy of drugs; but their faith is really not shaken, except in himself.

Incurable diseases furnish quackery, in every form and grade, its chief source of support and profit. Could these affections be stricken from the list of human ills, or could specific remedies be found adapted to their prompt cure, there would never be another medical pretender. Equally fatal to the pretensions of charlatanism would be a profound and unalterable conviction in the popular mind of the absolute incurability of certain diseases. The attempt to create such a belief will be deemed utopian. But may we not rationally conclude, that the same course of instruction, which has established the present universal belief in the efficacy of medicines, could, rightly directed, not only remove this ill-grounded faith, but in its stead implant in the mind of at least every rational person, a firm conviction of the incurability of many diseases? The statement is susceptible of demonstration so far as regards many families, and even communities, which have been fully under the influence of a candid and earnest physician. Even should we fail in such an undertaking, we do no more than our duty in ceasing to attempt impossibilities, and confining our labors to the practicable. We do not mean to discourage rational efforts to discover remedies curative of diseases now considered incurable. All such inquiries are praiseworthy and commendable. But we would discourage that routine practice, so prevalent, of repeating the trial of vaunted specifics in diseases thus far justly reputed incurable. We degrade rather than advance the science of therapeutics by such practice.

Is it not an important question, then, how far we ought to give hope by promises of new remedies in incurable diseases? An eminent writer, Dr. Latham of London, says:

> "But let us concern ourselves only with actual diseases, diseases existing and in progress. And of these let us ask whether the fact that they are, or are deemed to be, incurable or intractable—the fact that there is no medicine or method of treatment known by which they have ever been successfully managed—whether this fact be enough to warrant physicians in doing and trying anything or everything indiscriminately upon them?—enough to justify or excuse us in falling in altogether with the world's notions, and adopting the world's practice of medicine, as far as they are concerned? I think not; for this would be mere gambling with drugs, and not the practice of medicine. Gambling, too, it would be, of the silliest kind; the chances being incalculably against you. For thus to try this, that, and the other thing, implies an expectation of finding in some one of them a specific or special remedy for the particular disease, well knowing how very few such remedies exist in the whole world. The absurdity is neither more nor less than that of a man, who should trust the payment of his bills to the chance of finding a bag of money."

It is not contended that the services of a physician should cease when a disease is proved to be incurable. All incurable diseases may be palliated, and the progress of many may be materially arrested by proper treatment. This is, indeed, all that can be done, and this it is our duty to do; but all such efforts should be made with a distinct understanding, that they are not curative.

THE WEEK.

With the close of the year, we are not surprised to find one after another of our exchanges discontinuing publication. Since the commencement of the war, medical journalism has suffered equally with every other species of literature. At one stroke the entire southern circulation, which comprised an important part of the subscription list of many periodicals, was cut off, while in the north and west, most of the men who entered the army, discontinued their journals. These reverses have crippled severely the resources of even the best established periodicals, and, of course, have proved fatal to the more recent. We trust that those which have found it necessary to stop, will yet resume their issues under more favorable auspices. The following Journals, received since our last, have announced their discontinuance or suspension:—

With the November number, the *North American Medico-Chirurgical Review* (Philadelphia), edited by Dr. S. D. Gross, and his son Dr. S. W. Gross, and Dr. T. G. Richardson, was discontinued. This journal combined the interests of the Louisville *Medical Journal* and the Philadelphia *Medical Examiner*. It has been a periodical characterized by great ability in its review department, which embraced the most prominent portion of the work. Its original matter was of a highly practical order. The review of current literature was always prepared by eminent writers, and presented a careful digest of the progress of medicine. The style of execution did great credit to the distinguished house (Lippincott & Co.), which undertook its publication. We must regard the failure of this journal as a serious loss to the medical profession.

The Cleveland (O.) *Medical Gazette*, edited by Prof. Weber, is also discontinued with the December number. This Journal has been identified with the Cincinnati *Lancet and Observer* for the last year, and has been a most excellent publication. The latter journal will be continued.

The editors of the St. Louis *Medical and Surgical Journal* announce that the publication of that work will be suspended for the present.

The last number of the Cincinnati *Lancet and Observer* contains the following notice of the inauguration of the Bellevue Hospital Medical College:—

> "The trustees, faculty, and students made a gala-day of the inauguration of this college. In addition to the inaugural lecture of Prof. McCready, speeches were delivered by Prof. Taylor, president of the faculty, Hon. S. Draper, Archbishop Hughes, and the Rev. Dr. Chapin. In addition to this 'feast of reason and flow of soul,' the physical man was provided for by a splendid collation. The exercises, commencing at 12 M., were not finished till quite dark. A great crowd of ladies and gentlemen were present. The most interesting event of the occasion was the arrival of a patient with a shattered leg requiring amputation, which was '*performed at once, by Dr. Jas. R. Wood, with his usual ability.*' The New York *Daily Times*, which gives a long account of the proceedings, leaves its readers to infer that the operation was performed before the distinguished audience. We presume that it was. A lecture on typhoid fever, and one on ulceration of the os uteri, would have been quite as appropriate. We have asked ourselves frequently whether the profession in New York city has forgotten the code of ethics which forbids all operations before *laymen?* We presume it has, or such proceedings as the one above alluded to would be frowned down by all honorable men. Is it not time that distinguished professors should cease to resort to the tricks of mountebanks and quacks to build up their schools?"

It is remarkable with what eagerness medical men sometimes seize upon a newspaper or common report, derogatory to the character of their brethren, and believing in its entire credibility, give it currency. It proves a lamentable want of confidence in the honor and dignity of our profession. No well informed, ingenuous physician will entertain the opinion that Prof James R. Wood, and his associates, are obnoxious to the charge here made, even though the authority were much more respectable than a newspaper. The simple truth is, that an accident occurred at the hour appointed for assembling at the opening of the college course, necessitating immediate amputation; the operation was performed in the theatre of the hospital, as is usual, in the presence of the medical men and students present. The operation belonged to the hospital, and was no part of the college ceremonies. If any laymen were present, it was by accident, and under the circumstances quite unavoidable.

At the next meeting of the Academy of Medicine, Prof. Clark will give the history of a post-mortem examination in a case of supposed murder, and will submit the following points for discussion:

1. Whether a woman can make a cut upon her own throat, five and a half inches long, and to the bone, with a razor.
2. Whether suffocation can ever produce bloody effusion into the pleural cavities.
3. The question of drainage of bloody serum from the lungs into the pleuritic cavities, four months after death.
4. The relations of pulmonary apoplexy to suffocation.
5. Convulsive movements in death from hemorrhage; voluntary movements after fatal wounds of large arteries.
6. The amount of sprinkling of blood when both carotids are entirely severed.
7. The amount of blood on the instrument with which the fatal wound has been inflicted.
8. The concurrence of suffocation and hemorrhage when the trachea and carotids are completely severed.
9. The value of ecchymosis of the tongue, as indicating asphyxia from any cause.
10. Whether the direction of the wound will indicate suicide or homicide.
11. The loss of how much blood will be fatal.

The English journals announce the death of Sir John Forbes, M.D., formerly editor of the *British and Foreign Medical Review*, and better known in this country as author of a work, entitled, "Nature and Art in the Cure of Disease." He was in his 75th year.

We owe an apology to our readers for devoting so large a portion of the present number to a single lecture. But the interest which now attaches to the chlorate of potash, and the able manner in which Prof. Percy reviews its therapeutic uses, will, we think, more than compensate for the absence of our usual variety.

Mortality in Brussels.—The last official reports show that the present population of Brussels is 174,829; and that, during the past year, the deaths were 4,268, of whom 1,141, or about one-fourth, died in hospices, hospitals, and prisons. Suicides and attempts at suicide were 30, in which number 28 men and 2 women were concerned.—*Brit. Med. Journal.*

BIOGRAPHICAL SKETCH OF DR. KISSAM.

By Samuel W. Francis, M.D.

"Perfulgent eo ipso quod non videantur."

Richard S. Kissam, the son of the greatest American lithotomist that ever lived, was born in the city of New York, Fulton street, Oct. 2, 1808. At an early age he was placed under the charge of the Rev. Mr. Huntington, who indoctrinated his youthful mind with principles that lasted through a life of over fifty years. The young student afterwards became distinguished for his quiet zeal and patient industry at a school in South Farms, Conn., where also the rudiments of a classical education were founded. About the year 1824 young Kissam entered Union College, Schenectady, presided over by the learned Dr. Nott. For certain reasons, given by his guardians, the following year he moved to Washington, now Trinity College, Hartford, Conn., and at the time governed by Bishop Brownell, the president of the faculty. Becoming, however, more enamored of medical studies, and desirous of being graduated M.D., at an early date, Richard abandoned, for the time, the duties of a classical course, and pursued with vigor the respective branches of anatomy and physiology, chemistry and botany, and the collateral adjuvants. In 1827 he became a private student in the office of Dr. Mason F. Cogswell, Hartford, Conn., a surgeon of distinguished abilities, vast experience, and ethical practice, under whose supervision many of the delicate manipulations and bold theories maintained by him in after life germinated. About the year 1828 the young and enterprising doctor became associated with Dr. Todd, physician of the "Retreat for the Insane," an advantage of no small moment to one desirous of beholding the human organism in all its morbific changes. The lectures of the best New York professors were at times attended by young Kissam when professional enthusiasm glowed in his ambitious spirit. He was graduated doctor of medicine in the year 1830, at the College of Physicians and Surgeons, and immediately published his inaugural dissertation on Iritis, a thesis of original conception, independent views, interesting facts, and replete with the deepest research, within his power. Many of the doctrines there laid down have not yet been refuted, though a space of thirty years now intervenes since their first promulgation. For several years Dr. Kissam practised surgery in Hartford, Conn.; founded an Eye and Ear Infirmary, which was ever full, and operated numberless times for cataract with entire success and the greatest satisfaction. He also became the "Town Physician," a position of responsibility and no little labor. Soon after this the doctor married Miss Cooke, of Hartford. Domestic felicity, springing from the purest associations of beloved daughters and devoted wife, prolonged the days of him who lived for home. He became a public professor of religion in the First Congregational Church. In the following year, 1831, the doctor made every preparation for a scientific and professional residence in Paris. But French disturbances occurring at that time he was prevented, and remained in his former capacity of practitioner. In the autumn of 1834 the doctor and family removed to the city of New York, where a fine opening was made for him by his cousin Danl. W. Kissam, M.D., at that time failing in health. His receipts the first year amounted to $5000, and have ever remained most gratifyingly remunerative. Seldom obliged to yield to the fatigues of bodily exertion, Dr. Kissam became dangerously ill in 1835. In 1839 he was afflicted by the death of an infant son, Bushnell Kissam. About the year 1841 the doctor became so enfeebled by undue efforts and a want of relaxation, that he was on the point of leaving for Europe, but family duties required his presence: so he visited the springs of Virginia, Newport, etc., for six months; returned to this city, and never afterwards left but in answer to the calls of a professional character. Dr. Kissam performed the operation of transplantation of the cornea in 1838, in the presence of Drs. Roberts, Paul, Pratt, and Kissam, Sr. The patient, an Irishman, æt. 35, had lost one eye and was afflicted with staphyloma and adhering iris, in the other. Dr. Kissam removed the cornea from a pig, six months old, with entire and complete success. The patient's sight was greatly improved for two weeks. But as the humors were involved in disease, the new cornea was absorbed in one month. This operation exhibits the doctor's coolness, nerve, and extreme steadiness of hand. For further comments on the case see *New York Journal of Medicine*, March, 1844, and *Walton's Operative Ophthalmic Surgery*, p. 381.

Among the first to seek reform and lay bare the wretched system of hospital protection, at Bellevue, the doctor worked strenuously and with untiring animation. Many meetings were held at his own residence, and not a little of the credit deserved in the reorganization of its regulations, is most justly his proper share.

The doctor published a "Nurses' Manual," which met with success, and proved a vade-mecum to many before ignorant of home duties.

During 1844–45 Dr. Kissam instructed many private students in the anatomy of surgery, by practical dissection and public demonstration. In this same year he was appointed Professor of the Principles and Practice of Surgery in the Castleton Medical College, but, owing to physical inability, he declined the honor and continued his vocation in this city. In 1850 the doctor became the recipient of the degree of A.M., at Trinity College, Hartford, Conn. In 1847 he was appointed Medical Examiner and Counseller of the Connecticut Mutual Life Insurance Company in New York, and continued to hold this responsible position till the end of his life. He was also sent as a delegate from the Academy of Medicine to the National Medical Convention in Philadelphia. The Hon. Edward Everett passed many genial hours under his hospitable roof. Meeting with appropriate success, the doctor's bright career was darkened by the loss of his eldest son, R. S. Kissam, Jr., student of medicine, in Paris, a young man of fine abilities, ductile talents, and promising capabilities. His father never freed himself from the effects of this shock. Nov. 22, 1861, Dr. Kissam was attacked with pneumonia, and from the first became aware of his critical situation. Though visited by Drs. Clarke and Mott, and unceasingly attended by his friend, Dr. A. K. Gardner, he rapidly sank under the depressing influences of the disease, and breathed his last November 28th, at 12 M. Calm and conscious to the end, he moved to higher spheres. His youngest son, Corporal Astor Kissam, æt. 16, was fighting for his country at the time.

Dr. Kissam's appearance was at once dignified and unostentatious. His fine head, covered with a luxuriant growth of curly hair, now softened by the grey of thoughtful age, attracted while it pleased. His eye of humor, sparkling while inspiring confidence, was of an unusual brilliancy. His nose, classically formed, indicated one of firmness and refined associations. While the delicately organized extremities, gentlemanly bearing, spotless linen, neat attire, and unvarying politeness of the man drew others to him, for they evidenced the habits of one strictly scrupulous in the amenities of life, and ever mindful of the calls of innate excellence. Dr. Kissam, though ready to respond to the necessities of a professional career, and not unfrequently the eloquent expounder of some hidden truth or latent virtue, possessed the rare faculty of knowing how not to talk. This, in public assemblies, or when societies convene for the specific purpose of transacting business of no ordinary character, and when many occupy most valuable moments in exhibiting their own unfitness for the very post they have assumed, is as great a gift as is the volubility of him who utters maxims and unfolds the aphorisms of undeviating mysteries. Never in the course of his eventful and most useful life, did the subject of this sketch exhaust the patience of his audience, or rise but to elucidate some fact of moment, or reply to the assertions of acknowledged merit. If the doctor possessed one characteristic more strongly than another, it was his never-failing and untiring devotion to those he denominated friends. His time was theirs; his talents never backward in assisting what necessity demanded, and his cheering voice encouraging to those of his professional acquaintance who required the advice of one well schooled in the practical certitudes of medical lore. The sincere attachment of his patients, who now feel his loss, may be appreciated by the circumstance that they desire to know whom *he* would have selected to fulfil his duties: not the doctor of their choice. An honored member of several societies, an earnest listener to the sage remarks of those exalted by their Christian ties, Dr. Kissam lived beloved by those who really knew him. Respected by his friends, and mourned by all whom he had served with conscientious rectitude, he passed in calm and purest resignation to a better world. How truthful are the words of Horace:—

"Singula de nobis anni prædantur euntes!"

Reviews.

A THESIS ON HOSPITAL HYGIENE. By VALENTINE MOTT FRANCIS. New York: 1859. Printed by permission.

The medical profession will be thankful to the Trustees of the New York University for the permission granted the author to print his most excellent thesis; for the merits of the composition are of so high an order that it would have been a great wrong to have withheld it from the eyes of the public. In the twofold character of a historical as well as a practical instructor of the subject treated, this dissertation addresses itself to a much larger parish of readers than are included in the healing profession alone, and deserves on this account a wider circulation than its title would seem to invite. Nor is there less in the style, than in the matter itself, to commend this thesis to public notice. Learned, without being pedantic—precise, without being barren—classical, without being overcharged with recondite or far-fetched illustrations, the whole subject is treated with a breadth of purpose and a depth of research which amply exhibit the professional zeal of the author. His whole heart has been in the work, and certainly the manner of its execution shows that the head has kept pace fully with the behests of the soul. He has been satisfied with no stale treatment of a subject which has been already and repeatedly handled, but has illumined it with a new measure of light, and illustrated it with a new series of interesting facts borrowed from ancient and modern history.

Nor has the practical side of the investigation been in the least neglected, or sacrificed for the warmer hues of a historical panorama. Everything of importance, or which can contribute in the least to the efficiency of a hospital, is duly and critically considered. In reading these interesting pages, so full of mature learning and scientific accuracy, one hardly realizes that they are but the thesis of a young medical student, standing at the threshold of his Doctorate. For if the student be to the practitioner what the boy is to the man, we have a right to expect still better things from Dr. Francis—better things not in the sense of being more accurate, but better in the sense of broadness, progress, and discovery, when age and experience shall have strengthened unto its fullest power a mind already marked by its capacity for analysis and deduction.

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A SECOND MILITARY HOSPITAL has been recently organized in Cincinnati, under the medical charge of Dr. C. McDermont. The Sisters of Mercy have charge of the nursing department, and perform their duties in their usual efficient manner. The appointment of Dr. McDermont to this post is a most excellent one. The building used is a portion of the old German Catholic Asylum, on Third street.—*Lancet and Obs.*

Correspondence.

PHILADELPHIA.

AT last, I find time to place myself *en rapport* with the "MEDICAL TIMES," and jot down a few passing items. Since my epistle in the summer, the medical world has witnessed the usual opening exercises of the schools, two in number only, for, though the Pennsylvania has a nominal faculty of "four" with power to fill vacancies, yet the favored "quarto" did not deem it expedient to join in the dance, and it is to be presumed are "waiting for something to turn up."

The introductories at both schools were well attended, for everybody went to see "what a falling off" there would be, and thus the classes looked large, though not in any degree equal to the usual size. Ranged "behind the counter" were the professors and a few of the governors, the former with anxious faces, the latter joyful at the thought that "no matter as to the size of the class, you know we get our rent." But Mr. Editor, the next few days told a dismal tale, and now, the classes have, after great suspense and anxiety, reached about 275 for the University, and 250 for the Jefferson.

Speaking of the Jefferson, the quondam Professor of Obstetrics came home a few weeks ago, took unto himself a wife, and straightway sailed for sunny France, so there is no doubt, "putting all things together," that in the Spring we shall have another spirited contest for the Chair. But of this, more anon.

In a former communication, I spoke of quackery, and at the risk of boring you, I must again allude to the subject. Our city has recently been electrified by the addition to the irregular ranks, of a F.R.C.P., who has written and *printed* books, and who now, after curing everybody in London, condescends to locate here and kindly, through the medium of our secular papers, notifies those who may labor under affections of the cutaneous surface, as well as of the straight intestine, by some known as the rectum, that he is prepared to put a period to their sufferings. He is not of the common order, as we find him in the West end, amid the *Ton*, who, I understand, fully appreciate his distinguished presence.

I observe in your issue of the 30th ult., a remark favoring the increase of the number of surgeons to each regiment, and a reserved corps of surgeons in the civil line. Now, such an idea, a good one by the way, was thought of in this city, and immediately put in practice by a set of "medici" who were accidentally collected on a certain occasion, but, feeling their want of numbers, agreed to make a general call upon the profession in the city, and a day was appointed for the meeting. In order to exclude irregulars, each was to invite as many friends as he could notify in so short a time. The meeting was held, a committee appointed, and communication opened with head-quarters; their offer of "the services of the profession" accepted, and then the gentlemen aforesaid rested on their laurels. No means were taken to extend a cordial invitation to every member of our societies, as was obviously the proper mode of proceeding, but here and there, one of the favored few honored an outsider by offering to let him "put his name down to go," which, in many instances, was respectfully declined. So we go. Even in the matter of aiding our suffering country, we cannot be united.

The state of affairs has caused the death of one of our most prominent medical journals: the *North American Medico-Chirurgical Review* issued its last number in November. Under the guidance of Prof. S. D. Gross, and supported by those liberal publishers, Lippincott and Co., with a powerful corps of writers in each department, it deserved a long existence. We speak advisedly, and from a long and extensive acquaintance with medical journals, when we say that it fully equalled the best medical publication in this country or abroad.

Had the Messrs. L. started in lieu of it a "weekly," they would, despite the stormy aspect of our land, have reaped a golden harvest, and obtained the thanks of the profession, who are very desirous of having a journal like the "MEDICAL TIMES" published in Philadelphia.

In October our "County Medical Society" held an animated *Conversazione*, at which the members discussed the subject of puerperal convulsions, Dr. A. Nebinger leading off with a paper which obtained for him the highest admiration. The debate was well continued by our obstetricians, who seemed as divided as ever, concerning the treatment, etc. One gentleman had succeeded in *saving twenty-two out of twenty-five cases*, by *anæsthesia alone.*

In November, the subject was variola, Dr. Bell, of the Small-Pox Hospital, opening the debate. It would seem that the good doctor was still in the fossil state, as he announced his conviction that nothing has been learned on the subject. Several members were *slightly* astonished by this remark, and boldly proclaimed their belief in the value of brandy, etc., and urged their fellow members to employ the stimulating plan. It is much to be regretted that these discussions are not published as formerly, as much valuable matter is thus lost to the profession; if a little more enterprise were shown by the members in this matter, they might have a yearly volume of great value, fully equal to any "Transactions" published on either side of the Atlantic.

Yours, etc.,
A. M. LEON, M.D.

Medical News.

PROFESSOR VIRCHOW AS AN ORATOR.—It is well known that Professor Virchow is an ardent politician on the Liberal side, and he was somewhat seriously compromised by the troublous events of 1848. At the recent meeting of German Naturalists and Physicians at Spires (which, indeed, was converted into a demonstration in favor of German unity), his address on the influence of teaching natural science on the education of the people, created a wonderful sensation during its delivery, and was followed in the evening by a torchlight ovation. In this address he forcibly dwelt upon the necessity of furnishing a liberal education, disentangled from all influences opposed to a scientific spirit and a rational and experimental method; and he pointed out the importance of combining exercises tending to bodily development, consentaneously with attempts at mental culture, instancing the successful results attained in England by such combination. "His success," says M. Lereboullet, of Strasburg, who was one of the auditors, "was immense, and well merited; for, besides his other qualities, Virchow possesses most remarkable oratorical talents. His diction is pure, elegant, flowing, and lucid; and without any attempt at effect, or display of eloquence, he persuades and carries his audience away with him. He is said to be on the point of entering the Prussian Parliament, and doubtless great success there awaits him. It is to be feared, however, that he will become much, if not entirely, absorbed in politics, and that Medical Science will thus lose the services of one of its most illustrious representatives."—*Med. Times & Gaz.*

MERCURIAL SUPPOSITORIES.—At the meeting of the Pathological Society, on Tuesday last, during a discussion on Cases of Syphilitic Deposits in Internal Organs, brought before the Society by Dr. Murchison, a rather novel plan of treatment in cases of constitutional syphilis was mentioned by Dr. O'Connor. It consists in the use every night, or oftener, of a suppository, made of mercurial ointment. Dr. O'Connor stated that for some years back he has been in the habit of using mercury in this way, where its continued use is found necessary, so as to produce a constitutional effect. The advantages, he states, this plan possesses over the other modes of using mercury, are, that it is more readily taken up into the system; it does not produce irritability of the mucous membrane of the stomach and bowels, as is frequently the case when administered by the mouth; and the disagreeableness of mercurial inunction is avoided. Dr. O'Connor stated that he has now under his care, at the Royal Free Hospital, among the in-patients, five cases of constitutional syphilis, affecting internal organs, in which this plan of treatment has proved successful.—*Med. Times & Gaz.*

SICK AND WOUNDED SOLDIERS IN ST. LOUIS.—The large number of Federal soldiers in and around St. Louis has rendered an increase of hospital facilities absolutely necessary. The Government authorities have therefore secured and fitted up as hospitals some three or four of the largest buildings to be found in the city, which together with the several hospitals heretofore in operation will furnish accommodations for a large number of disabled soldiers. We have not the means of ascertaining the precise number of inmates in these various establishments, but from the best information that we can gather we are satisfied that we will not be wide of the mark, in stating that there are at this time *two thousand* sick and wounded soldiers in the various hospitals in St. Louis, and the number is daily on the increase. What proportion of these have been wounded in battle we are unable to say, but are of the opinion that it is quite large. The characters of the diseases prevailing are such as ordinarily occur at this season, and are in many instances of a severe type. From the "weekly report of the mortality among the soldiers in the hospitals and camps in the vicinity of St. Louis," from October 26th to November 2d, we learn that thirty-four deaths occurred during that period. From this it will be seen that the post of Army Surgeon in this region is no sinecure.—*St. Louis Med. and Surg. Journal.*

MEDICAL CLASS IN ST. LOUIS THIS WINTER.—We anticipate a very small class in St. Louis this winter. The peculiarly unfortunate situation of our city renders this not only probable, but almost certain. We are under martial law with its accompanying inconveniences. Besides, in the States from which most of our students come, the young men are almost all engaged in the war; particularly is this the case in Missouri. In our opinion, this is just where they ought to be, and we shall not therefore complain of the thinness of our class—we can afford to remain quiet for the present in anticipation of the better time that is coming. By next winter it is to be hoped that the unnatural war which now rages with so much fierceness will be at an end, and when this is the case we have no fears but that our class will at once reach, and even far exceed, its former size. Though medical teaching in St. Louis is at present depressed, our future is full of hope, and we are therefore not at all discouraged—not by any means.—*St. Louis Med. and Surg. Journal.*

THEORY OF THE VERTEBRATE SKULL.—The theory that the skull is composed of vertebræ, analogous to those of the spine, is not yet quite firmly established in science. Thus, Professor Owen has recently affirmed it for all classes of vertebrate animals, while Professor Huxley is averse to it. It is not generally known that the great German poet, Goethe, is the originator of this theory, to which he was, after long preparatory studies, led during his journey through Italy in 1790, on examining a sheep's skull, which he found in the Jewish cemetery in Venice. After him it was especially Oken, in Germany, and Dumeril, of France, who worked the subject; and lately Professor Virchow has taken it up, and published a work on it.—*Med. Times & Gaz.*

CASES of lead poisoning from taking snuff containing lead, are reported in the English journals.

Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.
Session of 1861-62.

By AUSTIN FLINT, M.D.,
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Lecture VIII..

Pleuritic Friction-Sound.—Metallic Tinkling.—Characters of, and Important Facts relating to, the Normal Vocal Resonance.—Exaggerated Vocal Resonance a Sign of Small or Moderate Solidification of Lung.—Diminished or Abolished Vocal Resonance a Sign of Liquid Effusion.—Bronchophony, a Sign of Complete or Considerable Solidification.—Ægophony, a Modification of Bronchophony.—Pectoriloquy, as distinguished from Bronchophony, and its Significance.—Amphoric Voice or Echo.—Remarks on the Whispered Voice as the source of Vocal Signs.—Facts pertaining to the Normal Bronchial Whisper.—Exaggerated Bronchial Whisper, a Sign of Small or Moderate Solidification of Lung.—Whispering Bronchophony, a Sign of Considerable or Complete Solidification.—Cavernous Whisper.—Whispering Pectoriloquy.—Amphoric Whisper.—Concluding Remarks.

Gentlemen:—There is a sign, belonging properly among the adventitious respiratory sounds, or râles, of which I have not yet spoken. I refer to a pleuritic friction or attrition sound. In the movements pertaining to the respiratory acts, the free surfaces of the visceral and parietal pleura move freely upon each other with a considerable degree of force. In the act of inspiration, the lung descends, and the thoracic walls are raised as well as expanded. The pulmonary pleural surface, and the surface of the portion of the membrane reflected over the thoracic walls, therefore, move in opposite directions. The same occurs when the lung ascends and the ribs descend in the act of expiration. Thus, in both acts the opposing pleural surfaces rub together with a force proportionate to the power exerted in the respiratory acts. In health, this rubbing together of the pleural surfaces is noiseless. The surfaces are smooth, polished, and moistened with halitus, so that the friction occasions no injury to the membrane, and no appreciable sound. When the surfaces, however, are roughened by disease, a sound is likely to be produced, and this sound becomes a physical sign of disease.

A friction sound belongs especially to the clinical history of pleurisy. In the early stage of inflammation of the pleura, the pleural surfaces are roughened with coagulable lymph. The sign is obtained sometimes, but not often, in this stage of the disease. There are two reasons for its infrequency in this stage. The lymph is now soft and does not much interfere with the freedom of the movements of the surfaces upon each other; and the respiratory acts are apt to be restrained by acute pain. In a short time liquid effusion usually takes place in sufficient quantity to separate the surfaces or compress the lung into a small space; then the friction sound, if it have previously existed, does not continue. You must not expect, save in occasional instances, to have the benefit of this sign in the diagnosis of pleurisy prior to liquid effusion, and still more rarely when the affected side of the chest is more or less filled with liquid. Happily the sign is not important for the diagnosis, other physical phenomena, taken in connexion with the symptoms, being quite sufficient.

It is, however, frequently present in a later period of the disease, when the liquid effusion has been in a great measure absorbed. The lung now expanding so as to bring the pleural surfaces again into contact over a large space, and the lymph having now become dense, the physical conditions for the production of a sound are present. The sign is, therefore, of not much practical value in diagnosis; hence, it is to be presumed that the nature and seat of the disease have been already determined. It is of utility in some cases, in which patients do not come under our observation until the disease has passed to the third stage, *i. e.* after absorption of the liquid effusion; but in this stage we have generally the contraction of the chest to guide us in the diagnosis.

The intensity and character of pleuritic friction sound vary considerably in different cases. Sometimes a slight grazing or rubbing only is perceived. It is rarely more than this in pleurisy, prior to the stage of effusion. But sometimes the sound is loud, and rough, so that it may be described as rasping or grating in character. It may be perceived by the patient. Several instances have fallen under my observation, in which the character of the sound has been accurately described by the patients. One of these was the case of a female patient recently in this hospital. The sound may be heard without auscultation, at a distance from the patient. In these instances, the pleurisy has advanced to the third stage, but close adhesion of the pleuritic surfaces has not taken place. The cessation of the friction sound denotes the occurrence of adhesion. The duration of the sound in this stage of the disease is variable. I have known it to continue for several weeks, the patients having convalesced sufficiently to be up and out of doors. It may persist even for months.

The sign occurs, not only in primary pleurisy, but when circumscribed pleuritic inflammation exists as a complication of another pulmonary affection. It is heard not infrequently in cases of pneumonia, more or less pleurisy, limited to the affected lobe, or lobes, generally co-existing. It is a sign of considerable diagnostic value in some cases of tuberculosis. The dry circumscribed pleurisies so generally occurring in the progress of tuberculous disease, may be accompanied by a friction sound which, under these circumstances, is limited to a small space at the upper part of the chest. A friction-sound, thus limited, is one of the group of accessory signs which concur to render the proof of tubercle complete when a positive diagnosis cannot be based on the ordinary signs usually present if the tuberculous deposit be abundant.

How is friction-sound to be distinguished? Generally there is no practical difficulty in the discrimination, if the distinctive characters are borne in mind. The sound usually accompanies both acts of respiration. It is a to and fro sound, *i. e.* heard both in inspiration and expiration. It may, however, be limited to inspiration. It may continue during the whole, or be present in only a part of one or both of the respiratory acts. It may be a continuous sound in either act, or it may be interrupted, sometimes consisting of a series of disconnected sounds. Whether feeble or loud, soft or rough, a friction sound appears to be superficially situated. The mind readily appreciates an apparent distance from, or proximity to, the ear in thoracic sounds; and this sound seems to be near the surface. It seems, indeed, sometimes to emanate from the surface, and we look to see whether the clothing does not rub against the stethoscope. It is hardly necessary to caution you to guard against this source of deception. The sound itself conveys the idea of rubbing or friction. In cases of primary pleurisy, it is usually limited to, or heard loudest at, the lower part of the chest. After having had a few practical illustrations, you will very rarely have any difficulty or doubt as regards its recognition.

In entering now upon the consideration of the auscultatory signs produced by the voice, I shall first notice a sign properly embraced in the category of vocal signs, although it is not produced exclusively by the voice, but also by respiration, by coughing, and sometimes even by the act of deglutition. I refer to the sign known as metallic tinkling. This name is descriptive of the sound. It conveys the idea of a metallic vessel being struck with a small body, for example, a pin; or, to borrow another illustration, it is like the sound caused by dropping small shot into a metallic basin. The sound is so distinctive, and the name so expressive, that you would hardly fail to recognise it, were you to meet with it before it had been pointed out to you at the bedside. A single tinkling sound only may be heard, but generally, with the act of speaking, a series of tinklings, two, three, or more, is produced; so, also, with the inspiratory and expiratory acts, either or both.

Without discussing the mechanism of this sign, it suffices to say that clinical experience shows it to occur when air and liquid are contained within the pleural sac, constituting the affection known as pneumo-hydrothorax. It is so distinctive of this affection, that it may almost be called a pathognomonic sign, being one of the very few physical signs having a claim to that appellation. It has, however, been observed in connexion with a very large tuberculous cavity, the same physical conditions here existing, viz. a large space containing liquid and air. Pneumo-hydrothorax, as you know, is due generally to perforation of the lung occurring in the course of tuberculous disease. The perforation is, perhaps, necessary for the production of the sign; at all events, it contributes to the production of it. Clinical observation and experiments on the cadaver show that the tinkling sounds are caused by the explosion of air bubbles, either at the point of the perforation, or on the surface of the liquid. And perhaps it may be also caused, as Laennec supposed, by drops of liquid falling from the upper part of the cavity. In the case of pneumo-hydrothorax, now in hospital under our observation, the sign is wanting. So far as my experience goes, it is rare not to find it in cases of this disease. I infer from its absence, and other facts, that, in this case, the perforation of the lung has nearly or quite closed. Amphoric respiration, and amphoric voice, are correlative signs which are also present in the great majority of the cases of pneumo-hydrothorax. These signs are wanting in the case now under observation, and probably for the same reason that metallic tinkling is absent. As we have already seen, the diagnosis of the affection is sufficiently positive even when all these highly distinctive auscultatory signs are not available. The evidence afforded by percussion and succussion, is quite sufficient for the diagnosis.

Before proceeding to give an account of signs which are due exclusively to the voice, we must consider the characters belonging to the vocal sounds heard in health. In auscultating the voice in health or disease, the best plan is to cause the patient to enunciate, slowly, the numerals, one, two, three. This secures a more equal vocal effort for a comparison of the two sides, than when we ask some questions relating to his condition. It is an objection to the latter mode that the attention is somewhat divided between the information which the answers of the patient convey, and the auscultatory phenomena. What do we hear with the ear or stethoscope applied to the chest, when a healthy person speaks?

Applying the ear or stethoscope to the upper anterior surface of the right side of the chest, we generally hear a distant, diffused reverberation of the voice, or resonance, accompanied, usually, with more or less vibration or fremitus. This is called the normal vocal resonance. The resonance proper, is the distant, diffused reverberation of the voice. The vibration or fremitus is superadded. The former is the acoustic sign; the latter is the sign obtained by palpation. Bear in mind, gentlemen, the characters of this normal resonance, as expressed by the terms distant and diffused.

I have specified the upper anterior surface of the right side of the chest, as the place to which the ear or stethoscope is to be applied. Why so? It is here that the normal resonance is most marked in health. It is more marked here than in any other part of the right side, and, next to this situation, it is best heard behind—below the scapula. But it is everywhere more marked on the right, than on the left side. This law is invariable. The disparity is greater in some persons than in others. The resonance may be wanting on the left, and more or less marked on the right side. Its intensity differs very much in different healthy persons. It is loudest, other things being equal, in those who have strong low pitched voices. In females, it is not infrequently wanting everywhere. These are the important facts pertaining to the normal vocal resonance. We have now to inquire, what are the modifications due to disease?

The vocal resonance may be simply exaggerated. There is no change in the characters which it has in health, save that its intensity is increased. This is one of the vocal signs of disease. It is called exaggerated vocal resonance. Of what physical change is it a sign? It denotes a certain amount of solidification; not complete or even considerable solidification, but a small or moderate amount. The value of this sign has relation, chiefly, to the diagnosis of tubercle. A frequent effect of a small or moderate tuberculous deposit, is an increase of the intensity of the vocal resonance. The two sides at the summit, therefore, are to be compared in this regard in seeking for the presence or the absence of the signs of a deposit. And here, as with regard to the breathing sounds, it is essential to take into account the normal disparity. And here, too, the disparity is such, that when we find the resonance considerably greater on the right side, we may be at a loss to determine whether it be a normal disparity, or denote an affection of the right side. Experience qualifies us to form a judgment in such cases, and we are guided, in a measure, by the coexistence of other signs. But if we find the vocal resonance greater on the left side, or even equal to that on the right side, we may decide, at once, that it is exaggerated by a morbid condition. This sign is a very valuable one in the diagnosis of certain cases of tuberculous disease, especially when the deposit is on the left side.

Abnormal weakness or abolition of the normal resonance, is another sign of disease. Pleuritic effusion produces this effect. Suppose a patient to have flatness extending from the base of the chest upwards, more or less, on the right side. The question arises, is this flatness due to liquid effusion or solidified lung? If due to the latter, we may expect to find a modification of the vocal resonance, presently to be described. If due to the former, the resonance will be likely to be weaker than in health, or entirely wanting. Weakness, or absence of resonance, thus becomes an important sign of liquid effusion.

I have assumed the effusion to exist on the right side. We determine that the resonance is weakened or abolished by a comparison of the two sides. Now, it being weaker on the left side in health, and sometimes wanting on the left, while it exists on the right side, we cannot so well determine that it is morbidly weak or wanting on the left, as we can on the right side. If the resonance be greater on the left side than on the right; or, if it be equal on the two sides; or, again, if it be absent on the right, and present on the left side, it is certain that it is morbidly diminished or abolished on the right side, provided the resonance on the right side be not morbidly increased. It is thus evident that this sign is more available in the diagnosis of liquid effusion into the right than into the left side of the chest.

Another vocal sign, and one of great value, is called bronchophony. What are the distinctive characters of this sign? The voice, instead of being distant and diffused, is concentrated near the ear and raised in pitch. When these modifications are present, we have bronchophony. What is the signification of this sign? It denotes complete or considerable solidification of lung. As a rule, wherever the lung is completely or considerably solidified, this sign is present. It is correlative to bronchial respiration, it corroborates the evidence afforded by the latter, where the two signs co-exist. It may be present when the bronchial respiration is wanting, and then it is our chief reliance in determining the fact of solidification of lung.

Observe the points of distinction between exaggerated vocal resonance and bronchophony. In the former, the resonance is still distant and diffused; the intensity of the sound is alone affected, and the accompanying fremitus is also often increased. In the latter, the intensity of the sound may not be augmented, but the voice seems to enter immediately into the ear, and it is high in pitch. The fremitus may or may not be increased.

Bronchophony is usually well marked in the second stage of pneumonia. When resolution is going on, and the bronchial gives place to the broncho-vesicular respiration, the bronchophonic voice disappears, and gives place to exaggerated vocal resonance, the latter being succeeded by the normal resonance when the exudation is entirely removed. Not infrequently the deposit of tubercle is sufficiently abundant to give rise to well marked bronchophony. The sign is then evidence of the amount of the deposit.

I may here notice a vocal sign, on which I do not care to dwell but for a moment. I refer to the sign called ægophony. The name is based on the resemblance of the sound to the bleating of the goat. Although goats are not very abundant in this country, all of you are probably familiar with the peculiar cry of that animal. The peculiarity consists in a high pitched, tremulous sound. When the voice presents these characters, viz. highness of pitch and tremulousness, we have ægophony. These modifications, however, must not belong to the oral voice, but be produced in its transmission through the chest.

Ægophony was considered by Laennec as a sign of a certain amount of pleuritic effusion. It is still to be regarded as having this signification. But it is a sign of very little practical value, because it is so rarely observed, and the other signs of effusion are ample for the diagnosis. The sign requires for its presence a certain amount of liquid; it is heard only for a brief period during the progress of effusion, or of its resorption, and, unless cases are examined daily and frequently, it is likely to escape observation. It is most likely to be found near the lower angle of the scapula than elsewhere. It would answer every practical purpose to consider this sign as a variety of bronchophony. It differs from bronchophony in being tremulous and not having the same proximity to the ear.

Another vocal sign is called pectoriloquy. What is pectoriloquy? Were you to put this question to many who have some smattering of auscultation, I imagine you would fail to get a correct answer. After examining the chest of a tuberculous patient, it is a common thing to be asked if there be pectoriloquy. You may be sure that when this inquiry is made, the inquirer has not a correct idea of the sign thus designated. It is apt to be confounded with bronchophony. This is not strange, inasmuch as Laennec himself, in point of fact, confounded these two signs. One of the few blemishes to be found in the great work of Laennic, relates to pectoriloquy. Clear and accurate as were his observations in general, his mind was evidently biased with regard to this sign. He committed his judgment too hastily to the conclusion that it was exclusively a cavernous sign, and generally present when cavities exist. Hence, he was led to describe three varieties of pectoriloquy, viz. complete, incomplete, and doubtful. Now, it is evident that the so-called incomplete and doubtful varieties are not entitled to be called pectoriloquy, but are neither more nor less than bronchophony.

The distinction between bronchophony and pectoriloquy is simply this: the former is the transmission of the voice, and the latter the transmission of the speech. In bronchophony the voice is near the ear, but in pectoriloquy there is more than this, the articulate words are perceived by the auscultator. You have only to discriminate between the voice and the speech to appreciate fully the distinction. To the novice in auscultation, mere bronchophony may, without due attention, seem to be pectoriloquy. The voice is sometimes transmitted with such intensity, that, knowing beforehand the words which are spoken, it is imagined that they are distinctly transmitted through the chest. This error may be obviated by asking a question, the answer to which is not already known. Care must also be taken to close the ear which is not applied to the chest, if immediate auscultation be practised, so as to prevent hearing the words as coming from the lips.

Accurately defined pectoriloquy is an extremely rare sign. The great infrequency of its occurrence alone, is enough to render it of very small practical value; but it is entitled to very little consideration for another reason, viz. it has not the definite signification attributed to it by Laennec. All experienced auscultators are now agreed that it is not exclusively a cavernous sign. It is probably true that it oftener occurs over solidified lung than over a cavity. In short, it is chiefly of interest as one of the curiosities of auscultation, and were it to be expunged as a distinct physical sign, its loss would scarcely be felt.

An important vocal sign is distinguished as amphoric voice or amphoric echo. I have already defined the term amphoric, as applied to percussion and breathing sounds. Its sense is the same when applied to a vocal sound. It means a musical intonation. Whenever the voice is accompanied by a musical sound, it is said to be amphoric. It is called amphoric echo because the musical sound follows the voice like an echo. A high pitched musical sound following the voice, is a sign of pneumo-hydrothorax. It is correlative to amphoric respiration, and is produced by the same mechanism. Metallic tinkling will generally be associated. All the signs just named go together, and are quite distinctive of pneumo-hydrothorax; if either be wanting, the others will be likely to be absent, and if one be present the others will generally be found.

Amphoric echo may be due to a large tuberculous cavity. It is rare for the sound to be as high pitched and as musical, under these circumstances, as in cases of pneumo-hydrothorax. An approximation to the amphoric voice characteristic of that affection, is sometimes heard, and, excluding pneumo-hydrothorax, it may be considered as a reliable cavernous sign.

In concluding the subject of auscultation, gentlemen, I shall ask your attention to a brief account of several vocal signs produced by the whispered voice. With a single exception, I am not aware that these signs have received any attention from auscultators prior to my own observations. They seem to me to form an interesting and important group of vocal signs, and it is surprising that they have not earlier attracted notice. But it is to be recollected that Laennec overlooked the important characters of different signs pertaining to the expiration. The study of the expiratory sound was commenced by one of our countrymen, the lamented James Jackson, Jr., of Boston. In the course of these lectures I have pointed out important distinctive characters of breathing sounds, derived especially from the pitch of the expiration as compared with that of the inspiration. Now, the vocal signs produced by the whispered voice correspond, as we shall see, with the respiratory signs, so far as the latter involve expiratory sounds, the act of whispering being, in fact, an act of expiration.

We must here, as elsewhere, start from the healthy sounds. What do we hear when the ear or stethoscope is applied to the chest of a person in health, and whispered words are pronounced? The best plan is to request the numerals, one, two, three, to be enunciated distinctly and deliberately; each numeral is then pronounced with a separate expiratory effort. If the ear or stethoscope be applied at the summit of the chest, accompanying each word is a soft bellows or blowing sound. This sound is more or less loud; it varies considerably, in this regard, in different persons. In some persons it is wanting. As a rule, it is not heard in health, except at the summit in front and behind, and it is louder in front. It is loudest over the situation of the primary bronchi. We may call this the normal bronchial whisper.

Is the normal bronchial whisper equal on the two sides of the chest? It is not. There is a disparity here as with regard to the respiratory murmur and the vocal resonance. The whisper is louder on the right side. The difference in the intensity of the sound between the two sides is more or less marked, persons differing in this respect. Another point of disparity is to be borne in mind: the pitch of the whisper is higher on the left side. This law is invariable in health, as well as the law as regards the greater intensity of sound on the right side.

Now, what are the abnormal modifications of the normal bronchial whisper? It may be increased in intensity, and raised in pitch by disease, in the situations in which it is heard in health. If the increased intensity and acuteness are not strongly marked, we may call the sign exaggerated bronchial whisper. The sign denotes small or moderate solidification of lung. It is correlative to broncho-vesicular respiration and exaggerated voice resonance. It is a valuable sign in the diagnosis of tubercle. I have long attached to it considerable importance in that connexion. In comparing the two sides of the chest at the summit, the points of disparity which have been mentioned must be recollected. A greater intensity on the right side may not be a morbid sign, but if, with greater intensity, the pitch is higher than on the left side, it is a sign of disease, *i. e.* of a solidifying deposit. But a greater intensity on the left side is evidence of disease. With these facts in the mind, the whispered voice will often be found to furnish strong positive or negative evidence in cases of suspected tuberculous deposit.

If there be considerable or complete solidification of lung, we have something more than an exaggerated bronchial whisper. The blowing is intense, the pitch is high, and the sound seems to be near the ear. These characters are not only present in the situations where the normal bronchial whisper is heard, but also where the whispered voice produces no sound in health, *i. e.* over the middle and lower thirds of the chest. A sound presenting the characters just mentioned, is almost invariably heard in the second stage of pneumonia, whether the upper or lower lobes are affected; and also in cases of an abundant deposit of tubercle. I call this sign whispering bronchophony, because it is analogous to bronchophony as produced by the loud voice. Its significance is the same. The two signs are usually associated, and both are correlative to the bronchial respiration. Whispering bronchophony sustains the same relation to the exaggerated bronchial whisper, as ordinary bronchophony to the exaggerated vocal resonance.

I distinguish another sign as the cavernous whisper. This sign, as the name implies, is distinctive of a cavity, and is a reliable cavernous sign. It is characterized by lowness of pitch. A low pitched, more or less intense blowing sound with the whispered voice, if developed by disease, proceeds from a cavity. Such a sound never proceeds from solidified lung: the pitch is then always raised. The cavernous whisper is correlative to the cavernous respiration which has been described in a previous lecture. Like the cavernous respiration, it is by no means present whenever cavities exist. It requires conditions for its production similar to those requisite for cavernous respiration, viz. a cavity of considerable size, empty, with free communication with the bronchial tubes, the walls not rigid, and its situation near the superficies of the lung. It is sometimes, however, marked when cavernous breathing is not distinct. And as cavernous breathing is sometimes manifested, as it were, in relief, by bronchial respiration surrounding the circumscribed space in which the cavernous breathing is heard, owing to the cavity being surrounded with tuberculous solidification, so the cavernous whisper, for the same reason, is sometimes presented in striking contrast with whispering bronchophony surrounding a circumscribed space corresponding to the site of the cavity.

We can understand why the cavernous whisper should be a low pitched sound, and why whispering bronchophony should be a high pitched sound, when we consider that the act of whispering corresponds with the expiratory act. A clear, loud whisper is performed by an act of expiration more forcible than in ordinary breathing. Hence, for precisely the same reason that solidification of lung gives rise to the intense high pitched expiratory sound belonging to the bronchial respiration, it should give rise to a high pitched intense blowing sound with the whispered voice; and for precisely the same reason that in cavernous breathing the expiratory sound is low in pitch, the cavernous whisper should be low pitched.

Whispering pectoriloquy is the exceptional sign referred to as having engaged the attention of auscultators. Whispered words are sometimes distinctly transmitted through the chest. Dr. Walshe thinks that this sign is more reliable, as a cavernous sign, than ordinary pectoriloquy. I am obliged to differ from him in this opinion. In my experience, whispered words are quite as likely to be transmitted through solidified lung as the loud speech.

Finally, the whispered voice, as well as the loud voice, may give rise to a musical sound. We may thus have an amphoric whisper. The whispered voice is quite as likely to give rise to an amphoric sound, as the loud voice, if not more so. The characters and the significance are the same in the two cases, and I need not therefore dwell upon this as a distinct sign.

My short course of lectures, gentlemen, on Auscultation, Percussion, and the other methods of physical exploration, is now ended. I have not time for any extended concluding remarks. I have endeavored to occupy the hours assigned to me in the most profitable manner, by confining myself to the consideration of the subjects almost exclusively in their practical relations. As regards the importance of the province of practical medicine which we have passed over in these lectures, I have only to repeat what I said at the beginning of the course; I am quite satisfied to leave you to form your own conclusions during the clinical studies which we are to pursue together in this hospital during the coming winter. I venture to hope that my course will be useful in preparing you to engage in these studies. This has been my aim, and I shall be happy if I have reason to believe that it has proved successful.

* * *

OPENING OF THE NATIONAL DENTAL HOSPITAL.—Dental Surgery is making rapid progress in the metropolis. On Tuesday night the new Dental Hospital in Great Portland-street was inaugurated, Dr. Brady, M.P., in the chair. The attendance of London and country dentists was very numerous. In an able introductory address, the Chairman dwelt on the importance of the Institution, not only as a school of dentistry, but as a means of affording relief to the various poor persons who suffered from diseases of the teeth. A series of resolutions were unanimously passed, in which the meeting pledged itself to support by all means in its power the new Hospital. A late dinner afterwards took place, to which about fifty gentlemen were invited. The toasts were numerous and drunk with enthusiasm, particularly those which referred to Dr. Brady, Mr. Robinson, and Dr. Richardson.—*Lancet.*

THE REGULAR MEDICAL SCHOOLS OF CINCINNATI (*Lancet and Obs.*) have each about sixty students in attendance on lectures this winter. The introductory lecture of the Medical College of Ohio was delivered by Prof. Sayler. No introductory was given in the Cincinnati College of Medicine. Thus far we hear but meagre reports of the schools; we understand, however, there are no lectures in Louisville or St. Louis.

THE number of medical students in Dublin is 806, against 487 in 1856.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,
OF NEW YORK.

No. IX.

In corroboration of the correctness of my position regarding the intimate association of migratory venous congestion with the hæmorrhoidal diathesis advanced in previous pages, I offer the following note from *Holland's Medical Notes and Reflections*:—"I have notes of some singular cases of this kind (sudden translation; involving in some cases, it may be, mere transference of blood, as where bronchitis supervenes upon hæmorrhoids; but in other instances changes in its quality, produced by the new and altered secretions which take place)—one, for example, in which there existed for many years a frequent and well marked alternation of headaches with hæmorrhoids; each very severe in degree and both almost altogether removed by the supervention of chronic bronchitis; which latter disorder has since continued, constantly and severely, for a long period of years. In the same case I have repeatedly seen a temporary translation for a few hours to the head, producing even delirium; which again was as suddenly relieved by the recurrence of a copious bronchial secretion. The connexion distinctly marked between bronchitis and hæmorrhoids, I have correctly noted in several instances." I had not read this note when composing my previous papers, and am therefore all the more pleased to find such an authority as Sir Henry Holland entertaining the same views, founded on similar original observations. It may not be without suggestive value to others, to relate the somewhat ludicrous incident, which, more than twenty-five years ago, first directed any attention to the "hæmorrhoidal diathesis." Scene, my office. Enter a Swedish peasant, looking as if nothing had ever ailed him, "Please, sir, I've got the hæmorrhoids in my head." The piles in your head! thought I, not yet thoroughly posted in all the expressions applied to disordered conditions in the vernacular of the North; the piles in his head! what does the man mean? It would not do to confess ignorance; so by beating about the bush, with skilful cross-questioning, I ascertained that he was subject to habitual hæmorrhoidal congestion, with occasional fits of piles, which congestion having abandoned its proper locality, had migrated to the lateral sinuses and the veins emptying therein, producing the peculiar hæmorrhoidal headache, which was relieved at once by the laxative effect of a little sulphur and cream of tartar. This was lesson the first; the latest received is contained in the information which has just reached me from Ohio, that in one of the most obstinate cases I was ever called upon to prescribe for, where several operations had been performed, and the pruritus ani embittered an otherwise unusually happy life, the old symptoms have all disappeared on the occurrence of so-called asthma—probably chronic bronchitis, of which disease an older brother, of the same constitutional characteristics has just died, after many years of suffering.

By easy steps we pass to the subject of *diabetes mellitus*—glucosuria; not indeed a disease of the urinary apparatus, as its names would indicate, but of the liver, affecting its glyco-genic or sugar-making function; hence more properly considered among the disorders of the digestive organs, might I not say of the portal system? From a very early period warm calcareous waters have been found to restrain the thirst of diabetic sufferers better than other fluids, and cold lime-water has been much employed for the same purpose. Increasing experience gradually led to the employment of the stronger alkaline waters, especially the very hot ones; and it is now well known that a considerable proportion of cases may be permanently cured by their use in the first stage, before tuberculosis or other serious organic lesion has rendered them hopeless. In my opinion Carlsbad stands at the head of the list. I have no statistics at hand; but not only do some of the latest French authorities acknowledge its value—which is allowing a good deal, considering their extravagant faith in their own thermal alkaline, Vichy—but I find several cures effected by its use recorded by my friends, Professors Huss and Malmsten, of Stockholm. The absolutely curative powers of this water are moreover demonstrated by the observation thus published by Rotureau:—"Experience has proved that good results are obtained in cases of diabetes treated at Carlsbad, *although no change be made in the usual diet.*" No diet indeed could do more than restrain certain effects; it could never be expected to modify favorably the pathological origin. An observation quoted by the same French authority, shows very conclusively the positive danger which may arise from the too free adoption of the ante-diabetic diet, while with the knowledge we now possess it suggests a grave doubt as to its advisability at all, as part of a strictly scientific treatment of the disease. "He (Dr. Oesterreicher) prescribed for a patient with diabetes mellitus, of which he was entirely relieved, though after a prolonged treatment (at Carlsbad). The following year he returned to consult the doctor, but by no means for the original disorder. An attentive examination revealed the existence of a considerable hypertrophy of the liver, great tenderness in the hepatic region, and extreme difficulty of digestion. M. Oesterreicher was of opinion that this new condition was caused by the too exclusive use of animal food and spirituous liquors, in which the patient had indulged too freely during the winter. He advised him to return to his former mode of life, and he left Carlsbad in perfect health, which he still retained four years afterwards."

Dr. Alonzo Clark has made known his successful treatment of quite a number of cases, and palliation of others by the use of bi-carbonate of soda alone; and Pavy has found by direct experiment that "the introduction of carbonate of soda into the circulation prevents the production of saccharine urine after lesions of the sympathetic nerve, otherwise occasioning it." Now, the waters of Vichy, being very much richer in carbonate of soda than those of Carlsbad, might be thought more applicable in diabetes, if carbonate of soda be all that is required; yet one of their warmest native eulogists—Durand-Fardel—says, that although their administration always diminishes the quantity of sugar present in the urine, even when it disappears entirely, it always returns, though in smaller quantity. If Carlsbad be, as I am quite prepared to believe, vastly superior to Vichy in the treatment of the disease in question, a part of the explanation may be sought in the fact that Vichy is scarcely more than a solution of bi-carbonate of soda, while Carlsbad contains quite a large proportion of the sulphate and muriate, the former being depletive of and derivative from the liver, the latter tonic to the whole apparatus of digestion. That I am right in my view is sustained by the following, reproduced from a letter on Kissingen, in the London *Medical Times and Gazette*, of March 30, 1861:—"Cases of diabetes are generally sent to Carlsbad; but that the springs of Kissengen have also a salutary effect upon this terrible disease, is shown by the case of a patient who, in 1858, was under the care of Dr. Erhard, of this place. This patient had suffered for several years from periodical hæmorrhoidal disturbances and congestion of the liver; and in 1857 he was first attacked by diabetes, which, in spite of the usual treatment, took such a severe form that the patient was given up. He was then ordered to drink Rakoczy, more with the view to relieving thirst and constipation, than in expectation of any radical cure. After he had taken ten bottles, the amount of sugar was very much diminished, and after forty bottles had been used, no trace of sugar was to be found in the urine, while at the same time the general health was greatly improved. In the further progress of the treatment, the quantity of urine was much diminished, and at last reduced to its normal average. The patient was, in fact, perfectly cured, and has remained so up to this time. The cause of diabetes in this case was probably abdominal plethora and congestion of the liver. M. Schiff has proved that an increased quantity of blood in the liver is alone sufficient to cause diabetes, without any further pathological disturbance of the liver, the nervous system, or alteration in the chemical composition of the blood. The liver, in which sugar is normally produced, forms, if congested, more sugar than is decomposed and consumed in the blood, so that the surplus is excreted in the urine. The curative effect of the Rakoczy in cases of this kind is easy to be understood, as it relieves abdominal plethora and hyperæmia of the liver; while no beneficial effect can be expected of it in cases of diabetes which are combined with diseases of the brain, consumption, etc." I will add that as the chloride of sodium, in which the waters of Kissingen abound, has the power of largely increasing the excretion of nitrogenous compounds, the diet of almost exclusively animal food, commonly prescribed, may doubtless be more freely indulged in while using them, than some others poor in that salt.

In the paucity of observations it must not be forgotten, that of thirty cases which Dr. Barthez observed an indefinite number of years after their treatment at Vichy, seven remained absolutely well. I think it probable that an artificial water, made on the model of Carlsbad, but richer in sulphate and muriate of soda, as well as iron and manganese, might prove a superior remedy for diabetes to any other known, especially considering the tendency of a long continued use of alkaline medicines to produce a peculiar impoverished condition of the blood—alkaline cachexia—of which Rotureau gives two fatal cases observed by himself, and to favor the development of organic disease.

What the value of balneologic treatment alone or as adjuvant is, we have no means of judging rationally; for the purpose of introducing soda into the circulation, simultaneously with stimulation of the cutaneous functions, the warm baths employed at Carlsbad and Vichy are doubtless not without their value; but it appears to me more advisable to administer the soda by mouth, and to stimulate the skin by exercise in warm woollen underclothing, keeping it *in condition* by an occasional Russian, or, preferably, Turkish bath. I form this opinion, in part, from finding absolute cures by simple hydropathic treatment, recorded by such authorities as Magnus, Retzius, and Malmsten.

Bright's Disease—Albuminuria, also belongs to the transition class now under consideration. I have neither original observations to offer on its hydro-mineral treatment, nor can I find any exact ones recorded, very few experiments having hitherto been made. Helfft recommends the ferruginous waters for the relief of the anæmia, which might have been expected; but Rotureau avers that some unexpected good effects in well defined cases have been effected by the internal use of those of Ludwig's-brunnen, at Mehadia, in Hungary; thermal, weak sulphurous common salt, without iron. It is stated that numerous cases are annually treated at Kissingen, and that complete cures are effected. One general rule is laid down by authors, namely, that all mineral waters are contra-indicated when dropsy is present, touching which rule I have to enter a caveat, for in rational doses, instead of the enormous ones prescribed at the springs, they cannot be contra-indicated, and may yet prove valuable remedies.

Gravel and Calculus.—Nobody expects to effect much in the way of removing concretions already existing in the kidneys or bladder by means of any internal medication. It is however unquestionable that a subsidence of irritation and a tolerance of the presence of the calculi may be effected by judicious hydro-mineral treatment, and, whether expelled or retained, a tendency to further formation corrected. This is most remarkable in the uric acid diathesis, quite as much when shown in the calculous as in the gouty variety; and as in the latter, so in the former, the alkaline waters are especially indicated, at least at the commencement and as the basis of the treatment. Unquestionably a proper use, especially of the *thermal* alkalines, tends to secure the expulsion of the calculi; at the same time, if the patient have been subject to nephritic colic (attacks of gravel), the tendency of too free a use of the waters to excite such attacks, should be borne in mind; and if the kidneys are very excitable, it may become necessary to abandon the use of the stronger alkalines for the slightly mineralized sodaic, or even the calcareous, provided there be also considerable excess of carbonic acid present. A free use of these as simple diluents, they being much more easily digested than ordinary potable waters, may indeed prove very serviceable to palliate symptoms, though inert vis-à-vis the diathesis.

In *oxaluria* and *phosphuria*, the weakest alkaline, or, preferably, bi-carbonated calcareous waters are alone admissible, and prove eminently serviceable; and in proportion to the frequency and severity of the attacks of nephritic colic, is the necessity for a recourse to their use. Contrexeville in France has an immense reputation in these cases.

There is a class of *hæmaturias*, of which the most important pathological element is passive congestion of the kidneys, leading to exudation. All that I have seen have been referable to the hæmorrhoidal diathesis, and are quite amenable to hydro-mineral treatment. The French boast the good effects of their favorite Vichy; I should think its use only indicated in complex cases to modify a uric acid diathesis; but even then should dread the effects of the excess of alkali, and prefer much milder waters. The caution already given when speaking of phthisis, not to administer too large a quantity of fluid at once, should be borne in mind, though less imperative, in treating hæmaturia. The Kissingen Rakoczy I have more confidence in than any other; and administered in carefully graduated doses, it has effected the happiest results. The following case is illustrative: T. R., M.D., æt. 53, has been subject to piles thirty years, the annoyance arising therefrom increasing, and latterly accompanied with obstinate constipation; six months previously to the date of this history, suffered extremely from a superficial ulcer, just within the margin of the arms. About eleven years before, after eating largely of strawberries, suffered an attack of bloody urine. The following year the same thing recurred, and it was now observed that eating apples also caused a relapse. The attacks lasted longer and longer, the last one over a year, the slightest indiscretion in diet causing a great increase in the amount of hæmorrhage. Sometimes, during a temporary lull, these would only be a copious dark brown red sediment in the urine, with mucus. The patient had become exceedingly anæmic and feeble, walking two blocks with difficulty, supported by cane and the arm of another person. A careful examination of this very unpromising case (I have neglected to mention that there was also hereditary tendency to organic disease of the kidneys), convinced me that it was one of migratory hæmorrhoidal congestion, and that if no organic disease was yet established, cure, or at least great relief, might be accomplished; but as the symptoms had been much aggravated by a visit to Saratoga and the use of Congress water, there was only too much reason to dread the worst. I prescribed a cautious use of the Rakoczy, which brought on a genuine hæmorrhoidal attack during the first days of its use. This was highly encouraging; it was prescribed more freely; the frightful suffering after each stool began to diminish, in three months was gone. The urine gradually recovered its normal character, though indiscretions in diet still occasionally cause a darker tint in that fluid; a hint not to be neglected. The piles seem to have subsided for good, and the patient is strong and hearty, actively engaged in business, and walking five or six miles a day without difficulty or fatigue.

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REPORTS ON RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.

OF NEW YORK.

I.

ANACAHUITE WOOD.—NITRIC ACID IN INTERMITTENT FEVER.—PENGHAWAR-DJAMBI.—PROPYLAMINE.

ANACAHUITE WOOD.

The first notice we have of this reputed remedy for consumption was through the columns of the *Criminal Zeitung*, a German paper published in this city. Something more than a year ago a Berlin correspondent of the above-mentioned paper stated that the Prussian consul at Tampico had informed his government of the existence of this wood, and its successful employment in the treatment of tubercular consumption. This information induced the government to test the efficacy of the remedy in the Charité, without however meeting with the satisfactory results that were expected from the representations of the consul. From a subsequent article, in the same paper, from the pen of Dr. Krog of this city, formerly of Berlin, it appears that further experiments were more successful, producing complete resorption of the tubercles in the first stage of the disease, and often affording great relief in the more advanced cases. The failure in the first series of experiments he thinks was due to the defective mode of preparing the wood. This subject attracted the attention of Prof. Maisch, now of the New York College of Pharmacy, who wrote to Dr. Krog (see *Am. Jour. Pharm.*, March, 1861), and received in reply a corroboration of the above statements, although he was not able to give its botanical origin. It is given in the form of decoction made with from ʒ vj. to ℥ j. of the wood and ℥ xij. to ʒ xiv. of water boiled down to ʒ v, which is to be taken two to four times daily, combined with other remedies. This should be continued for several months, due attention being paid to diet, etc. Mr. Daniel Hanbury, in the *London Pharmaceutical Journal*, describes what he has seen of this wood as consisting "of truncheons of about two feet long, varying from the thickness of a finger to that of a man's arm. The wood is covered with a thick, fibrous, greyish-brown bark, coarsely furrowed longitudinally with deep cracks, and so tough that it may be stripped off in pieces of considerable length. A white pulverulent matter, resembling an efflorescence, occurs between the layers of the liber, from which it escapes as dust when the bark is torn. When one examines a transverse section of a truncheon, one perceives the bark to be of considerable thickness, and to consist of two more or less defined zones—the inner more compact. The wood is of a pale brown, marked with concentric zones, which, however, are too little distinguished from one another to be counted with any certainty. The pith is frequently eccentric; its transverse section sometimes shows a stellate form." He does not know its botanical origin, but believes with Dr. Krog that it may be safely placed in the natural order of the Papilionaceæ. Prof. A. Buchner, of Munich, describes the wood as tasteless, the bark slightly astringent, yielding to the decoction or tincture a sherry brown color, blackened by a persalt of iron, but unaffected by either a solution of gelatine or iodine. Analysis yields nothing important save a large amount of oxalate of lime, in the form of fine powder filling the parenchymous cells. Prof. B. suggests that this may be the source of the medicinal properties of the wood, acting as a preservative to the lungs by combining with oxygen, and yielding carbonic acid and carbonate of lime. This might be tested by therapeutic experiments with the oxalate of lime. Though insoluble in water, the fine particles of the powder readily pass through the strainer with the decoction, and probably cause the dryness in the throat experienced after taking the draught. On the whole the reports from Europe concerning the efficacy of this article are somewhat contradictory, and given only in outline, no details of cases having yet reached us. It is said, however, that a spurious article is already in the market.

NITRIC ACID IN INTERMITTENT FEVER.

The employment of nitric acid in the treatment of intermittent fever is recommended by Prof. W. A. Hammond, in the *Maryland and Virginia Medical Journal*, for February, 1861. He reports a number of cases treated by him at Fort Riley, Kansas Territory, about four years since. Thirty-two were treated with nitric acid, and nine with the sulphate of quinine. Of those cured by nitric acid, three had previously used quinine without effect; and those in which quinine had proved successful nitric acid had been employed without benefit in two, and in one other had to be omitted on account of producing nausea, heartburn, etc. The average period required to permanently arrest the disease was three days with either remedy. The nitric acid was given in doses of ten drops, diluted with water, three times per day, and the quinine in doses of eight grains, three times per day. Since these cases were treated he has frequently employed the nitric acid for the same purpose, and has met with such success that he now seldom resorts to any other treatment in simple uncomplicated intermittent fever; and considers the subject both in view of the successful employment and cheapness of the remedy, as one of sufficient importance to the physicians of malarious districts as to induce them to give the remedy a trial, and report for the information of others the results at which they may arrive.

PENGAWAR-DJAMBI (PALEA CIBOTII.)

This new hæmostatic is derived from the stipes of a fern of Java, and consists of very soft, delicate filaments, flexible, and so light as to float in the air for a long time. They vary in color according to their thickness, from a golden, light brown, to a dark grey or blackish. It is said that six grains form a mass sufficient to arrest bleeding from an artery one line in diameter. It absorbs water so readily as to sink in about half a minute. When subjected to heat it yields an empyreumatic odor, and detonates under combustion. Its styptic effects are supposed to depend upon its capillary attraction overcoming the force by which the water in the blood is held in combination, the immediate consequence of which is the coagulation of the remaining portion of the blood, by which, together with the elasticity of the filaments, now enlarged by the absorption of fluid, a firm adhesion of the coagulum to the surface of the wound takes place, causing a firm closure of the mouths of the bleeding vessels. The advantages claimed for it over other styptics, is, that the effect is quicker, that it produces a coagulum where other agents have failed, as in carcinomatous or scorbutic ulcers, and that it does not retard the healing process. When used, it should be crumbled, and a sufficient quantity (five grains to a scruple) pressed for a few minutes directly on the bleeding surface, afterwards applying a suitable compress. By this means it is made to penetrate into the finest apertures on the surface of the wound, causing instant coagulation of the blood oozing from the smaller vessels, and said to be reliable in all cases where the divided artery does not exceed a line and a half in diameter. Whether experience will substantiate what authors have told us concerning this much extolled styptic remains with us to be seen.

PROPYLAMINE.

This new remedy, which has recently attracted some attention both in Europe and in this country, as a remedy for acute rheumatism, belongs to the class of alkaloids, with which the materia medica of the present century so plentifully abounds. It was discovered by Wertheim in 1850, and may be described as a nearly colorless, transparent liquid, with an ammoniacal, and sometimes fishy odor, soluble in water, and has an alkaline reaction. Its composition is C_6H_9N. It forms crystallizable salts, most of which are soluble in water and alcohol,* again decomposed by the addition of potash. It is obtained artificially from narcotina, codeia, and some other sources, or may be extracted from various substances in which it is contained by nature. Among the latter sources, are herring pickle, cod-liver oil,* ergot, the flower of cratœgus oxyacantha, in the fruits of the sorbus aucuparia, in the chenopodium vulgare, etc. The most fruitful source, or that from which it is most readily obtained, appears to be the herring pickle. The following is Mr. Proctor's formula, published in the *American Journal of Pharmacy*, vol. xxxi. page 127.

"Take any quantity of herring pickle, obtained from dealers in salt fish; this is put in a retort, or tight still, with sufficient potash to render the liquid strongly alkaline, and the liquid heated. A well refrigerated receiver, containing some distilled water, being attached, heat is applied as long as the distillate has the odor of herrings. This is then saturated with hydrochloric acid, evaporated carefully to dryness, and the dry crystalline mass exhausted with absolute alcohol, which dissolves the propyl salt and leaves the muriate of ammonia. From the former the pure propylamine may be obtained in solution by means of hydrate of lime, using strong precautions to refrigerate and condense the vapors which are actively disengaged almost without heating." The next reliable source of propylamine is cod-liver oil, in which it is said to occupy the place that glycerine does in some other oils. In a review of the progress of materia medica for the last ten years, read before the Maine Medical Association, by H. T. Cummings, M.D., of Portland, and published in the Boston *Medical and Surgical Journal*, July 25, 1861, the writer gives some attention to this matter, and concludes with apparently good reason, that if propylamine possesses the efficiency claimed for it in the treatment of rheumatism, to it is due in a great part the reputation cod-liver oil has hitherto held in similar affections. Dr. Awenarius, of St. Petersburg, is the first who has used this substance in medicine. He is said to have treated 250 patients in hospital, between March 1854 and June 1856, besides having used it to some extent in private practice, and he affirms that pain and fever had in every case disappeared the day after the administration of the medicine. It has been used to some extent in this country, especially in the neighborhood of Philadelphia.

Dr. R. H. Stabler writes to the *American Journal of Pharmacy*, giving some account of his experience in the employment of this remedy. He thinks its great value is best demonstrated in acute rheumatism of young subjects, where the disease, unless controlled, is liable to attack the heart. He found in these cases relief to follow in from twenty-four to thirty-six hours. In chronic cases it requires a somewhat longer time. It is usually given in water, the dose for an adult being from two to three drops every two hours. Some prefer it in form of a chloride, others in form of an iodide. For information concerning the latter combination, the reader is referred to the first volume of the MEDICAL TIMES, page 205. Dr. Awenarius administered it as follows: Propylamine gtt. xx., distilled water ℥ vj., and if necessary, Oleosaccharum of Menth. Piper. ʒ ij. Dose, a teaspoonful *every other hour*.

INFANT MORTALITY IN IRELAND.—Despite legislative enactments favoring the poorer classes, notwithstanding the absence of famine or pestilence, the population of Ireland has decreased by 787,842 souls, which amounts to a proportion of 12·02 per cent. in the decade of years. *Lancet.*

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

TWO FATAL CASES OF MEASLES.

[Reported by J. LEWIS SMITH, M.D., Curator.]

DURING the present year, nearly every form of the contagious disease of childhood has been treated in this institution. Measles, scarlet fever, whooping-cough, and varicella have successively appeared among the children, but through the rigid system of "quarantining," the three first were arrested, without materially increasing the number of deaths. Varicella, which appeared last, and cases of which have not been isolated, is still prevailing. The following fatal cases of measles present some features of interest. The histories were prepared from the notes of the house physician, DR. ALEXANDER HADDEN.

CASE I.—March 16, 1861. A. B., æt. 10 months, was admitted to-day from the Nursery into the Hospital, under the care of Dr. Swift. The eruption of measles has just appeared over the body, and the symptoms are favorable. 19th. Doing well; eruption fading slightly. 20th. The eruption receded to-day, and convulsions occurred, ending in death in a few hours.

Sectio Cadaveris.—Brain somewhat congested, but otherwise healthy; the posterior portion of the lower lobe of each lung, dark red, feebly crepitant, and more solid than in the natural state. Under the microscope, this part of the lung was found to contain an unusual proportion of blood discs. No other pathological appearance was observed in the lungs or elsewhere, except the usual bronchial affection, but the abdominal viscera were not closely inspected. The above history is interesting, as showing the condition of the viscera in a case of sudden recession of the rubeolar eruption. It was one of congestion of the brain and lungs, but mainly of the latter. Perhaps the pulmonary congestion was the first stage of pneumonia, and was the cause, rather than the effect, of the recession.

CASE II.—March 8, 1861. J. McE., æt. 2¼ years, is admitted to-day, from the Nursery into the Hospital, with the eruption of measles over the whole body. He had the usual premonitory symptoms for several days before the appearance of the rash, and is suspected to have incipient hip disease. The constitutional symptoms to-day are slight. 11th. Is very much worse; pulse weak, and numbering 164; the eruption hemorrhagic; sordes on teeth and gums; respiration accelerated; is inclined to sleep; evacuations frequent, dark, and offensive; ℞. Quin. Sulph. gr. ¼, every three hours, beef tea, wine whey, etc. 12th. Mucous râles on both sides of chest, and moderate dulness on percussion in each infra-scapular region. Continue treatment. 16th. Symptoms somewhat better. The stimulants have been gradually withdrawn, but nutritious drinks are continued. 26th. Is becoming progressively emaciated since the last record, and the symptoms are much worse. From the great emaciation, and protracted cough, phthisis is suspected. 28th. Died to-day of exhaustion.

Sectio Cadaveris.—36 hours after death; great emaciation; rigor mortis; the anterior aspect of the lungs is healthy, but the entire lower lobe, and the inferior half of the upper lobe on the left side, the posterior half of the upper and lower lobes, and a little of the middle lobe on the right side, are dark red, non-crepitant, and not susceptible of inflation, unless by great force of the breath. On making an incision into these portions, the cut surface is found of a lighter color, in places, than the hepatized lung usually is, as if about passing into the stage of "purulent infiltration," but in all parts the lung is firm. The diseased portions are adherent to each other, by fibrinous exudation, and the pleura is more or less opaque from the same cause; liver enlarged and very fatty, the oil globules being mostly free; very few hepatic cells are observed; stomach and upper part of small intestines healthy; mucous membrane of the lower portion of the small intestines, and of the colon, vascular and thickened, and over a considerable portion of the latter is a delicate layer of fibrin; mesenteric glands slightly enlarged; thoracic and abdominal organs otherwise healthy; brain not examined.

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* The sulphate is not soluble in alcohol.

Remarks.—The points of interest in this case are the following:

1st. The great emaciation, and obstinacy of the pulmonary disease, in a scrofulous patient, without tubercular deposition. This case, and many others treated in this institution, prove that secondary pneumonia, though occurring in the most unfavorable cachectic condition, does not, in general, become complicated with tubercles, and is not, therefore, in its nature, incurable. This fact has been frequently verified by the autopsies made in those cases of pneumonia, so often developed in the emaciated and asthenic state, produced by the summer complaints, but exceptions are not infrequent.

2d. The grey appearance of the solidified lung. "Purulent infiltration" of the lung is rarely met with, at the post-mortem examinations of infants and young children in the Hospital. The lung solidified by inflammation, whether primary or secondary, has, with a few exceptions, been of a dark red hue; and in protracted cases, instead of becoming of a grey color, as in the adult, small abscesses form, containing the *débris* of the lung, mixed with pus cells, while around these abscesses the pulmonary tissue preserves the appearance of the second stage of pneumonia. On this account, the grey appearance of the solidified lung in this case was interesting. The light color was found, however, by the microscope, to be due, not to pus cells, but to the large number of oil globules, some free, but most of them collected in groups ("compound granular cells"), or contained in the cylindrical or pavement epithelial cells. Pus cells, if any were present, were certainly not in sufficient quantity to produce the light color. Oil globules usually appear in a lung whose function is arrested by congestion or inflammation, but so abundant a production of fat in the lung is remarkable.

3d. The latency of the colitis, and the deposit of fibrin on the mucous surface of the colon, instead of in the larynx, as is common after measles.

Reports of Societies.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, *November* 22, 1861.

DR. JAMES R. WOOD, Chairman.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULE OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

PROF. ALDEN MARCH of Albany (who was present by invitation), being requested to give his views upon the points before the meeting, remarked that, so far as the question related to the varying points of attachment of the capsule to the os femoris, Dr. Smith's simple and ingenious mode of measurement set the matter at rest. He believed that we should find a difference in the point of attachment at the posterior part of the neck of the bones in the normal and abnormal specimens. He agreed with Dr. Smith, that in all cases of *intra-capsular* fracture, the neck, whether more or less attached to the head or shaft of the bone, was almost or entirely absorbed, before any effort at reunion took place, either by ligamentous or bony material. And, futhermore, that as absorption progressed, when it began to encroach upon the attachment of the capsule in its natural site, the attachment gradually receded, or was carried outwards, so as either to approach closely to, or be transplanted into the posterior inter-trochanteric line. This view of the subject, he stated, was supported by the analogy which existed between the pathological conditions of the capsule in those cases, and in those of morbus coxarius. In the latter disease, as the destructive process goes on, the capsule will be carried back upon the face of the bone, to correspond with the enlargement of the acetabulum. He then exhibited several specimens of hip disease, with the capsular ligament thus abnormally attached, which fully illustrated the point referred to. Three specimens of his own, of intra-capsular fracture of the cervix femoris, were next exhibited; the first, to show the rapid absorption of the neck, without any effort at union; the second, absorption of the entire neck and ligamentous union at a later period; and the third, to illustrate nearly the same amount of absorption as in the other cases, but with *bony union.* The first specimen of fracture was from a white-washer, who fell from a ladder and injured himself in the hip. He was taken to the almshouse, where he died in the course of a few weeks. Dr. March saw the case at the time of the accident, and called it a fracture of the neck of the femur. On making the post-mortem examination, he found, to his surprise, that the neck of the bone had completely disappeared, as if it had been cut out. There was, however, no ligamentous or other attachment of the head to the shaft of the bone.

The second specimen was recently obtained from an almshouse subject, who, in January, 1860, while engaged in sport with other inmates of the institution, was merely thrown upon the injured hip. The attending physician, Dr. Boulevare (who reported the case to Dr. March), diagnosticated the injury to be, fracture within the capsular ligament. It was treated by placing the fractured limb upon a pillow, and confining the patient on his back for several weeks. In the course of a few months, he could get about pretty comfortably by holding on to chairs, tables, etc., with his hands. On the 28th of August, 1861, nearly twenty months after he received the injury, he died from an attack of dysentery.

In the third specimen of intra-capsular fractures (in which there appeared to be bony union), there was more of the neck attached to the shaft at the anterior face of the bone, than in either of the other specimens, though posteriorly, the relation of the head and shaft appeared nearly the same. No history of this specimen could be obtained; it was purchased abroad some years since with other pathological specimens for the museum of the Albany Medical College.

A fourth specimen, which he claimed to be an intra-capsular fracture, was also shown. It occurred in a boy ten or twelve years of age, who, from the date of the accident, was always lame. He died at the advanced age of sixty-two years. The history of the case could not be procured, since the attending surgeon died some thirty or thirty-five years before the patient. The non-professional testimony was abundant; and strongly in favor of the nature of the accident assumed. In this case, the line of the fracture on the anterior face of the neck, and in fact on the posterior face, corresponded in a remarkable manner with the last specimen exhibited. The upper part of the thigh bone of the same subject, from the opposite side, was exhibited, and found to be nearly in a normal condition, with the exception of a slight change in the form of the head of the bone, which must have taken place at an advanced period of life, from chronic arthritic inflammation.

He next exhibited several specimens of extra-capsular fracture of the neck and trochanter, some of which were beautiful examples of that variety called impacted fracture. But one specimen seemed to be peculiar in these particulars; there was little or no distension; no *shortening,* no *inversion,* and but the slightest amount of *eversion;* without doubt, no crepitus could have been detected at the time of the accident, and hence a direct diagnosis would have been almost impossible. He remarked, that it was curious to observe, that in those specimens (and he thought it would be found true in all other extra-capsular fractures, whether impacted or not), there was no absorption or shortening of the neck. Whereas there was great shortening, and in most instances almost entire absorption of the neck of the bone, when the fracture was within the capsule; while the contrary was the case when the fracture was without the capsule. This being the case, would not the post-mortem condition of the part furnish complete and satisfactory evidence of the nature and situation of the fracture during life?

Dr. March suggested to all present, to apply the test of injecting plaster of Paris in all those cases of *suspected intra-capsular* factures, where death occurred at a period remote from the receipt of the injury, that we might ascertain as conclusively in the pathological, as Dr. Smith had done in the anatomical specimen, the precise extent of the attachment of the capsule on the posterior face of the neck of the bone. He also suggested, as a subject worthy of study, and needing explanation, why it is, that the bony material of the neck of the femur was so freely and so rapidly absorbed in intra-capsular fracture; and by what means it was accomplished, while the same effect does not follow in other fractures.

Assuming as he did, that in most cases of intra-capsular fracture of the neck of the femur, the fracture took place near or close to the head of the bone, and that *all* of the neck on that portion connected with the shaft was absorbed; and that the capsule *recedes*, as the destructive process goes on, so as to be found in due time attached posteriorly near, or upon the posterior inter-trochanteric line, as has been shown in the specimens exhibited by Dr. Smith; he believed that one of the difficulties in deciding whether a certain fracture was entirely within the capsule, was satisfactorily removed. This discussion was calculated to bring two points prominently before the medical public, viz. the *rapid absorption* of the neck of the bone, in intra-capsular fractures; and the abnormal connexion of the posterior portion of the coxo-femoral capsule.

The specimen of Dr. Holmes, to which Dr. Smith had referred, was submitted to the examination of the Medical Society of the State of New York, at its session of 1860. Dr. March was of opinion that it was a genuine case of complete intra-capsular fracture, with bony union. But as some of the members of the Society seemed to doubt the correctness of this opinion, a committee, consisting of Dr. Brinsmade, of Troy, Dr. Parker, of Poughkeepsie, and the speaker, was appointed, to whom the subject was referred for a critical and thorough examination, both by maceration and the microscope. But the committee never obtained possession of the bone, and reported accordingly at the session of 1861, with the request (suggested by Dr. Holmes) that it be continued, which was done. But up to this time, the committee have neither received the specimen, nor heard from its possessor.

The Doctor, in conclusion, took occasion to say something about morbus coxarius. He presented several specimens of necrosis of the head of the bone detached from the neck; one from the living subject, from whom it worked out spontaneously, and the patient recovered; and another which had been found in a post-mortem specimen. In a third specimen, about one third of the head of the bone was found dead, but not entirely cast off. A fourth specimen was exhibited, in which an exfoliation of the head of the bone, somewhat larger than the thumb nail, was cast off, and extracted through an incision made into the joint at an early period of the disease. This patient also recovered. These specimens, he thought, would go to prove the correctness of his views presented to the medical public in a published paper of the *Transactions of the American Medical Association* for the year 1853, on the Pathology of Hip Diseases, and the mechanical means suggested to prevent progressive absorption. They will, he said, especially help to prove the efficacy of the treatment of my friend Dr. Sayer, who not only uses extension and counter-extension to relieve the inflamed and tender parts from pressure, but advocates cutting freely into the hip-joint under certaian circumstances. If nature feels the necessity and adopts the means, painful and tedious though they be, to separate the dead head from the shaft of the bone, Dr. Sayre can do it much more speedily and effectually with his knife. The effort, he said, that was made a few years ago, to bring into disrepute the mechanical treatment of hip disease (as suggested by himself), and to recommend exercise, and motion of the joint, in all stages of the disease, and to rely upon constitutional remedies, seems about as preposterous as would be the treatment of a broken leg without any dressings or means of support, and directing that the individual thus affected should move about and take free out-door exercise.

Progress of Medical Science.

PREPARED BY P. F. C. DESLANDES, M.D.

Cramps accompanying Cholera, treated by the Metallic Armatures (Metallic Apparatus.)—*Translated from the Gazette des Hôpitaux.*

The excessive heat of the middle of June, and that through which we have just passed since the beginning of August to the last few days, have brought on, as it almost unavoidably happens every year at the same period, a large number of gastro-intestinal affections simulating cholera, and even some well marked cases of cholera. The character of the cholera affections now reigning is in fact a prompt reaction, most usually without any consecutive symptoms, and without any other sequence but an extreme lassitude and prostration, from which the patients are long to recover. It has nevertheless seemed useful to us to take this opportunity of calling the attention of our readers to a very simple means of combating the cramp and spasms so painful which accompany the evacuations of cholera; we mean the application of the metallic *armatures* of Dr. Bury. The following is what this ingenious physician wrote to us a few weeks ago:

"A few days ago, my dear doctor, you had the kindness of ascending with me the 160 steps which lead from the peristyle to the upper floor of the Hotel Dieu, and there, in one of the rooms of Mr. Harteloup, who had done me the honor of calling me to see two of his patients laboring under nervous affections, you have seen metallotherapy represented by a simple copper basin, borrowed from the attending nurse, and two *bands* of metal obtained from Mr. Trousseau's clinic, stop in a few seconds a violent attack of hysteria; and you remember, I have no doubt, that whenever you wished it, I always could in as short a time, alternately suppress or bring back a new attack by removing or reapplying the metal, to follow in the same way, according to your indications, every spasmodic or neuralgic phenomenon which had appeared elsewhere than under the surfaces covered, and finally, once convinced, as if you would rather have it so, your curiosity been satisfied, keep the patient until the end of the attack in the most perfect calm. The experiment lasted, if I remember well, about half an hour, and you had all the time necessary to ascertain that the cold of the metal had nothing to do with this, for after the first ten minutes it was already warm and at the temperature of the patient's body.

"Well, my dear doctor, what you have seen a few days ago, what so many others have seen me do for twelve years since metallotherapy was discovered, I have done it a hundred times in 1849, publicly in the hospitals, and that often in the presence of witnesses like Messrs. Rostan and Bouchut, Michel Lévi, Monat, &c.

"I will speak first of a cholera patient on whom I experimented in Mr. Monat's wards. I pass over the details to come to the point in question.

"G. presented about three o'clock in the afternoon all the symptoms of well marked Asiatic cholera; he had excruciating cramps in the lower limbs. At seven o'clock in the evening the treatment had as yet brought no relief. I applied a copper ring on each leg on a level with the affected muscles. The cramps ceased immediately. At the end of half an hour of perfect calm, I tried to remove the rings, but the nervous phenomena so soon reappeared that the patient entreated me to have them replaced. I had no sooner acceded to his request when calm returned. A little later in the night, the arms were also taken with most violent muscular convulsions. The patient then seized one of the rings he wore on his legs, and used it for several hours in pursuing the cramps wherever they appeared. This time again the metal was effectual, and it is worthy of remark that the right arm, whose hand held the ring, was affected only when fatigue obliged the patient to hold the metal in the opposite hand.

"We are now at the Val-de-Grâce. On the 14th of April, the day of my first visit to this hospital, I was taken to a patient attacked with cholera three hours before. This man, in the most dangerous condition, feels all over his body such violent cramps that he disturbs all the inmates of the ward by his incessant agitation and rending cries. At the invitation of Professor Lévi, I applied in his presence a complete *armature* of iron wire, all the pieces of which, ten in number, had been previously warmed. In less than two or three minutes after, the patient had become quite calm. I tried to remove the bracelets from the right arm, and almost immediately the cramps returned in that limb, and in that only. I reapplied them, and they disappeared anew. About half an hour after, Mr. Lévi questioned the patient, who told him that he no longer suffered anywhere except a little in the right side. The perfect tranquillity and expression of his face witnessed besides to his sincerity. However, M. Michel Lévi and the assistants were not yet convinced, there might be coincidence. I then removed the whole apparatus, when the cramps reappeared as bad as ever. I replaced it, and they ceased entirely. I offered to renew the experiment, but it was thought useless, and M. Lévi went away, leaving to his assistants, Drs. Masselot and Krug, the care of continuing the observation. These gentlemen remained with me about three quarters of an hour by the patient, and during all that time there was a complete calm—decubitus dorsal, only one vomiting. At twelve o'clock I withdrew, carrying with me the *armature*, which I thought henceforth useless; but hardly was I out of the hospital than already the cries and the agitation had returned as in the beginning. An hour after two nurses were required to prevent the man from getting out of bed. The experiment was decisive. Therefore, from that day, metallotherapy was admitted to experiment night and day in the wards of the Val-de-Grâce. What it did there has been reported by Drs. Masselot and Krug in the *Echo du Val-de-Grâce*.

"The results which I have obtained in 1849 with my *armatures*, and those obtained during the epidemic of 1854, have also been obtained by others sometimes with the same apparatus, sometimes with simple copper bands, iron wire, or any other metal formed of an alloy of copper. Among the latter I may particularly mention Drs. Defaucamberge and Durand, who having been sent on a mission in 1849 to the Department of the Haute-Marne, rendered, by their success, the copper applications so popular that at Biesles, Nogent, Mandres, etc., whenever a case of cholera existed in a family an armature of argental was immediately fabricated; the inhabitants of these villages, almost all cutlers, having the argental in abundance (this metal is an alloy of copper, zinc, tin, and nickel), and applied it without waiting for the arrival of a physician. Dr. Campardon told me a year ago, that the previous summer, at Montmartre, in a violent case of sporadic cholera, he had also improvised with no less success, a similar apparatus with iron wire bought at the nearest hardware store. The same object may be attained at less expense. During the epidemic of 1849, M. A. Richard obtained the same results on two cholera patients of the *rue des portes* by means of apparatus which are everywhere at hand, by means of simple copper kinchen utensils."

We have ourselves just had an opportunity of trying the simple means so vaunted by our *confrère*. We have just been called to see a young man, seventeen or eighteen years old, of a strong constitution, laboring under a serious attack of cholera: vomiting, whitish stools, præcordial anxiety, extremely painful cramps, cold skin, cyanosis of the face and extremities, weakness of voice, &c. After inducing reaction, and moderating the evacuations, I had to attend to the cramps to which this young man was a prey, and which were most violent. Twice he had been a little relieved by frictions with the opium and camphor liniment used in such cases; but these moments of calm were very short, and the cramps returned as strong as ever. I was at a distiller where metallic utensils were numerous.

I had placed under the legs of the patient a large copper covercle on which the two calves, which were the principal seat of the cramps, rested In a few moments, and in my presence, the cramps began to decrease, then ceased completely. I had ordered to leave the covercle in place at least half an hour. At the end of this time the cramps had not reappeared, and it was removed. Since then the patient has not felt anything, and has quickly recovered.

American Medical Times.

SATURDAY, DECEMBER 21, 1861.

PROPOSED REFORMS IN THE MEDICAL DEPARTMENT OF THE U. S. ARMY.

Bills have been introduced into both Houses of Congress designed to re-organize the Medical Department of the Army. We have as yet seen but the outline of the Senate Bill, which provides for the appointment of the following officers:—

"Director-General, with rank of Brigadier-General, who shall be chief of the medical corps, and perform the present Surgeon-General's duties.

"Sanitary Inspector-General, with rank of Colonel of Cavalry, who, under the Director-General, shall have general supervision of all that pertains to the sanitary condition of the army.

"Six Sanitary Inspectors, with the rank of lieutenant-colonel of cavalry, who shall inspect the sanitary condition of the troops, and report to the Sanitary Inspector-General.

"Surgeons of first class, with rank of major of cavalry, for staff, hospital, and bureau duties.

"Fifty surgeons second class, with rank of captain of cavalry, to be assigned to duty with regiments.

"Assistant surgeons, not exceeding seventy, with rank of first lieutenant of cavalry, with duties of assistant surgeons.

"Not exceeding seventy-five medical cadets, not less than eighteen nor more than twenty-three years old at their entry, to be examined by a medical board. After three years' continuous service they may be examined for promotion to the rank of the highest class of non-commissioned officers.

"As many Hospital Stewards as the service requires, designated by a Sanitary Inspector, on the recommendation of the Senior Surgeon of the post, division, or regiment, with rank of First Sergeants of Cavalry.

"Sections 2, 3, 4, 5, and 6, provide for selection by the President, from the whole Army Medical corps, of suitable persons to fill the places of Director-General, Sanitary Inspector-General, and Sanitary Inspectors, none of whom are to be over sixty years of age. Other officers are to be appointed and promoted by seniority. Vacancies are to be filled from civil life or from Brigade Surgeons of volunteers, after due examination, who are not to be over thirty-five years of age.

"Section 5 repeals the allowance of extra rations to Surgeons, upon the completion of ten years' service.

"Section 7 provides for the retirement of every medical officer sixty-five years old.

"Section 8 repeals all inconsistent laws."

From this outline of Senator Wilson's bill, it would appear that it is designed to accomplish the following highly important improvements in the administration of the Medical Department of the Army:—

1. The introduction of an efficient corps of medical officers, specially devoted to sanitary inspection and hygienic administration.

2. The selection and appointment of the Chief of the Medical Bureau—the Director-General—as well as all the Sanitary Corps, solely with reference to *fitness*.

3. The establishment of a rule for the honorable retirement of every medical officer, at a specified age of presumed inability.

4. The recognition of at least one degree of higher rank in the medical Staff.

5. A better definition of the various ranks in the Medical Staff, and a systematic assignment of general departments of labor to each rank or class of surgeons.

6. An increase of the class of Medical Cadets, and a proper recognition of their status and privileges in the Medical Staff of the Army.

These objects appear to be eminently desirable, and they may unquestionably be attained without serious disturbance of the Medical Staff as at present constituted. Indeed, there is reason to believe that the leading provisions of Senator Wilson's bill will be cordially approved by the best members of the staff, and by the profession generally. Military Surgeons have for years been endeavoring to procure for their department of the military system, such improvements in its organization and status, as would be commensurate with the demands of the service and with the dignity and claims of the medical profession. But year after year, the humble suggestions and efforts that have been made by the Medical Bureau and Staff for the attainment of these objects, have been coldly negatived and laid upon the shelf by the military committees in Congress. For many years, every effort for the improvement of military medical service has been strangled by some congressional committee, and usually with no better apology than the disingenuous plea of economy, though no ideas of sordid gain had animated the efforts of the staff, and none but advantageous results to the national treasury would have resulted from the proposed reforms. In view of these facts, and the obvious need of enlarged and better arrangements for meeting the demands upon the Medical Bureau in time of war, there can be but one opinion respecting the duty of forwarding the objects of this bill. Of its details and the precise bearings of all its provisions we cannot judge intelligently until we have seen the complete draft of the act; but there are considerations connected with this important measure and with the duties, results, and rewards of medical service in the army, in which the entire profession should have and express deep interest; for in no other department of medical life are the results of the physician's and chirurgeon's skill and the improvements of the healing art so conspicuously held up to public view, and in no other field of medical service are the opportunities so ample and inviting for adding to the treasures of hygienic and surgical knowledge. And now, in the midst of a war that has suddenly called to the tented field more than half a million of noble men from loyal states, and nearly as many from the revolted territory, greater responsibilities, a greater work, and larger facilities for surgical and hygienic inquiry and progress, are presented to our military surgeons than ever before were afforded in the history of armies. Let nothing prevent our profession from being at once and fully prepared for its responsibilities in this vast field.

The total number of medical officers now serving in the Federal forces—regular and volunteer—fully equals the entire body of medical men in the staff and regimental service of the British army. The claims and the duties of the American are certainly in no respect inferior to those of the British Medical Staff. It is therefore reasonable to inquire if the proposed modification of the laws affecting the Medical Bureau of our army will give to it all the advantages that have been accorded to the medical service of the British army under the recent reforms effected through the intelligent agency of the Hon. Sidney Herbert, and the present Director-General, Mr. Alexander. The medical system of the British army affords a better and more practicable standard of comparison for us than that of France, because, until very recently the educational basis of admission to the British medical service was quite similar to our own; while France has for a long period kept up at *Val-de-Grâce* a grand educational institution of military medicine, and thereby given origin to a more elaborate and classified system in the division of labor, and the gradations of rank and promotion in the service.

One thousand and seventy-five medical officers on full pay at present perform the duties of the British army medical department. These consist of:—

1 Director-General.

8 Inspectors-General of Hospitals.

32 Deputy Inspectors-General of Hospitals.

345 Staff and Regimental Surgeons (66 of whom are Surgeons-Major, having served twenty years).

684 Staff and Regimental Assistant Surgeons.

5 Apothecaries and Dispensers.

The Assistant Surgeon must do five years' active service before being promoted to the rank of Surgeon, though for distinguished services and excellence he may be promoted out of the regular course, the reasons therefor being duly "gazetted." The Surgeon may be promoted to Deputy Inspector of Hospitals only after ten years' active service, except in cases of special "ability and merit," when the promotion may be ordered by the Crown. For promotion to the office of Inspector-General, the Deputy must have served five years at home and three abroad. But in regard to all regular promotions, it has recently been ordered that in emergency or whenever the good of the service requires it, the Secretary of State for War may shorten the several periods of service.

The Director-General and both classes of Inspectors are administrative officers, and by the law of 1859 they must retire from the service on attaining the age of sixty-five years. Surgeons-Major, Surgeons, and Assistant-Surgeons, are regarded as having executive professional functions, and with a view to maintain the efficiency of the service "they must be placed on the retired list when they shall have attained the age of fifty-five years."

The reforms in the British system in the year 1859, gave increased rank to the higher classes of Surgeons. The rank of Major-General is accorded to those Inspectors who have served in that class three years; Brigadier-General is accorded to the Inspectors during their first three years' service; and to the Deputy-Inspectors is given the rank of Lieutenant-Colonel, and after five years' service in his class the rank of Colonel is accorded. The rank of the junior medical officers is similar to that in our own army, but the Surgeon after having spent twenty years in the service becomes Surgeon-Major, with the rank of Lieutenant-Colonel.

The Queen has ordered that the "medical officers shall be held entitled to the same honors as other officers of equal relative rank" in her army. "Good Service Pensions" are awarded to the most meritorious officers, and twelve officers of such merit are to be named as Her Majesty's Honorary Physicians and Surgeons.

The foregoing summary affords the idea we designed to present to illustrate the great improvement that has recently been wrought in the medical department of the British army. And, inasmuch as all the essential improvements effected in the British system are greatly needed and may at once be wrought in our own army, we would invite attention to some of the practical results already effected in the British army by these improvements.

First.—The better division and system of the administrative and bureau duties of the medical department have at once brought order out of confusion, and given a high degree of utility to the statistical records and the professional observations, experience, and reports of the army surgeons.

Second.—The Bureau at London having organized a Sanitary Branch, with Dr. T. G. BALFOUR as its Inspector-General, great interest has been awakened throughout the army in reference to the causes and the prevention of disease.

Third.—The Statistical Branch of the Bureau is rapidly developing the sound logic of numerical results in connexion with medical and hygienic observations in the army.

Fourth.—The medical officers find that their power of usefulness as well as their personal enjoyment of military life is vastly augmented by the increased respect that is accorded to themselves and their official suggestions and orders.

Fifth.—The statistical, sanitary, and medical reports of the department present unequivocal testimony to the increased efficiency of the medical service in the saving of life and the prevention of disease in the army.

For our American army, with its rank and file made up of noble citizens, and its medical staff embodying the best talent of the medical profession, we would hope for results not less important to humanity and to medical knowledge than those already experienced or foreshadowed under the reforms in the Medical Department of the British army. To accomplish such results it is necessary that both the merits and defects of the existing system of administration in our Army Medical Department be properly appreciated, and that whatever is good and sufficient in that system should be carefully preserved and strengthened. Revolutionary and violent changes are not called for; on the contrary, the existing system only needs to be expanded and strengthened, and have its facilities and powers for usefulness in the departments of hygienic and medical inquiry and improvement, statistical records, official inspection, and professional education, made fully adequate to the humane and scientific responsibilities and requirements of the service. All this can be attained without disturbing the harmony and efficiency of the Staff as at present constituted. And in order to insure the most intelligent basis of action, and the greatest breadth and harmony of views in reference to the reforms proposed and required, we would suggest that the Congressional Committees that have this subject in charge should invoke the counsels of the most competent and noble members of the Staff, and such members of the Sanitary Commission as have given most attention to military medicine. It was by the lucid testimony and counsel of Surgeon ALEXANDER, Dr. MAPLETON, and Dr. BALFOUR, of the staff, and Dr. SUTHERLAND and FLORENCE NIGHTINGALE, as Sanitarians, that the royal decision was obtained for the improvement of the British medical service. Such high-minded surgeons of the staff as Dr. R. C. WOOD, SATTERLEE, CUYLER, and HAMMOND, in council with the medical members of the Sanitary Commission, and the Military Committees of Congress, could not fail to agree upon the best measures for attaining such improvements as are required for the highest efficiency and usefulness of the Army Medical Department. There certainly are some medical improvements needed, but of them we may speak hereafter. The Act of Congress by which they shall be authorized need not be burdened with clauses to specify them in detail. The duty of developing and giving effect to the needed improvements in their particular application will naturally devolve upon the most enlarged and competent minds that grace the staff. But there should be no unnecessary delay in maturing the organic law by which those improvements will be procured.

Whatever is attempted for the modification of the existing system, should be done in accordance with the counsels of those who fully appreciate the merits and defects of that system, and who would consent to no injustice to the senior members of the staff. Our rational convictions and observations are decidedly in favor of the principle of selection and promotion for merit, and honorable retirement on the attainment of an age of physical disability. But we confess to a serious doubt whether the duty of selection for merit can safely or honorably be committed to any other than a medical council. In view of this and many other important professional and public interests involved in the proposed changes, and with much respect for a system whose humane ministrations and rigid exclusion of medical abuses have made the name of American Military Surgeons everywhere honored these forty years, we would ask in behalf of our brethren of the army staff, and in the name of the profession, that the contemplated changes be worthy the noble spirit of that staff, and in every way commensurate with the progress of medicine and the demands of humanity.

THE WEEK.

IT is truly gratifying to see with what unanimity the loyal women of the country pour into the depots of the Sanitary Commissions their offerings for the soldiers. Every village and neighborhood should have its organization upon the following basis proposed by the commission:—

"1. Let the first woman whose heart is stirred with yearnings to do something in her own town, go to two or three of her neighbors and take counsel.

"2. Let them agree on some convenient day and hour for a meeting of ladies, in the lecture-room of some place of worship, or in the town-house, or school-house.

"3. Let notices of this be written, and carried to the pastors of all the churches in town, with a request that they be read, with comments by the pastor, in each society, at the close of service.

"4. Let the ladies meet—select a President and Secretary; then let such portions of this pamphlet be read by the President as will serve to explain the nature and working of this Society.

"5. Then let the ladies present form themselves into a Soldiers' Relief Circle, to meet once a week from 1 to 4 P.M.—the time to be spent in sewing or knitting for the soldier.

"6. Let them, in addition to the President and Secretary already elected, choose a Treasurer and two committees—one on supplies and work, of three ladies, and one on correspondence, forwarding, and all other business, such as storing, engaging rooms, etc., of the same number."

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The *Lancet* has the following suggestions upon "Kleptomania," a form of insanity remarkably prevalent in this country:—

"It is known to those who have the best means of obtaining information, that this itch for appropriation exists to an alarming extent, even amongst what is known as good society. Thus the London shopkeeper who deals largely in 'portable property' of a very valuable kind has often to keep a private Argus constantly on the watch to gently suggest that the Comtesse de l'Arceny must really restore that bracelet which accidentally got into her ladyship's muff, or to inquire whether the bill shall be sent in for that bit of old lace slipped into her pocket in a fit of abstraction. Of course, if arrested, it would be proved that she had been in the habit of inflicting great grief on her family by the frequent recurrence of similar playful tricks—was, in fact, a kleptomaniac, and therefore to be let off; whereas when the inspector proves a dozen previous convictions against Mrs. William Sykes for shop-lifting, it is considered to show that she is an incorrigibly bad lot, and deserves a proportionally increased punishment. Of course, the old argument would in the former case be urged, that the kleptomaniac is under an irresistible influence inducing the appropriation, with full knowledge of the risk and disgrace incurred if detected. This is simply untrue; for if the desire *were* uncontrollable and the dictates of reason disregarded, articles would be taken in full sight of the owners, and not, as is always the case, craftuly purloined in the belief that the theft is unobserved. The ordinary defence as to the crime being evidently without motive is as much opposed to law as the previous argument is to logic. For English law does not trouble itself in cases of larceny with the motive, believing that when the offence is committed, the motive *va sans dire.* Thus Blackstone defines theft to be the felonious taking and carrying away of the personal goods of another, and drily remarks that the offence commenced 'at the time that the laws of *meum* and *tuum* were established, whenever that was.' And we doubt whether the most credulous of these exculpating latitudinarians would consider Bardolph as a kleptomaniac, though his crime was sufficiently motiveless when he 'stole a lute case, bore it twelve leagues, and sold it for three half-pence,' and was eventually hanged for only filching a 'pax of low price.'"

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One of the lasting evils of war is the large number of maimed persons that are thrown upon the charities of the country. Government gives to such persons, it is true, a pension which, if properly husbanded, is capable of relieving the individual from pressing want. We would suggest the propriety of supplying such persons, as far as possible, with artificial limbs, under proper surveillance, and withholding a monied pension, at least of any considerable amount. Mechanical surgery would be capable of rendering many an idle pensioner capable of self-support. This would be economy in Government, and might give to society many an active and useful member who would be otherwise a burden upon the public.

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Professor Hamilton commenced his course of lectures on Military Surgery at the Bellevue Hospital Medical College, on Wednesday last. This is the only school in the United States which has a special chair of Military Surgery. An excellent opportunity is offered to those who are intending to enter the army, to learn the practical duties of the army Surgeon, from one who has great practical experience.

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If there is one class of servants which more than another deserves commiseration, it is that whose duty is to carry, rock, and toss the ever-restless nurslings of the rich. From morning to night, and night to morning, with infinite variations, these gymnastics are performed, until the poor nurse worn out with

Days of toil and nights of waking,

clandestinely administers a soothing syrup, and obtains rest. But "baby tending" is going the way of all manual labor, and we now have announced an apparatus—a "baby tender"—that with tireless activity jogs the infantile generation into good humor. We heartily welcome any contrivance which promises, as does this invention, to relieve nurses of much of their drudgery, and nurslings of the danger of being drugged with narcotics.

Correspondence.

DISEASES AND SANITARY CONDITION OF THE PRISONERS AT FORT WARREN, BOSTON HARBOR.

[To the Editor of the American Medical Times.]

Sir:—Since our arrival at this post the health of the prisoners, held by the United States Government, has materially improved, notwithstanding many obstacles at first had to be overcome. While confined on Governor's Island, New York Harbor, the diseases they suffered from most were, measles, typhoid and intermittent fevers, scabies, pneumonia, phthisis, bronchitis, diarrhœa, and dysentery. The pneumonia was sometimes idiopathic, but in a greater proportion of cases it made its appearance during the progress of, or at the commencement of the typhoid symptoms.

The prisoners of war, when first landed, counted nearly seven hundred persons. They were placed in Castle William, which is the round fort, located on an isolated point of the island. The men were poorly clad, with thin clothing, and some of them had already suffered from measles and other affections. The contour, age, and health of these prisoners, with but few exceptions, was far below the general standard of regular soldiers, and their appearance plainly showed they had recently attended very little to ablution and other important laws of nature. The measles spread in the casemates of Castle William from one company to another, until all liable to the contagion fell victims to its pernicious influence. Happily, each and every one thus seized, passed safely through the disease, although many, for a considerable time afterwards, were annoyed by that common sequela, viz. a short, hoarse, and barking cough. In the casemates the men were somewhat overcrowded, but to offset this, they were allowed extensive limits to ramble, unrestrained, about, and enjoy the fresh air. Particular attention was paid to keeping the quarters clean; and in order that the air might be as pure as possible, these rooms were regularly ventilated and whitewashed. In the issuing of rations, furnishing cooking utensils, and good beds, the prisoners were placed on the same footing as United States soldiers. Although Surgeon W. J. Sloan used his best endeavors to prevent it, typhoid fever broke out and prevailed to an alarming extent among the prisoners. The sick were sent to three different hospitals, and by judicious management, the disease was finally brought under control and many lives saved. The patients were mostly the worst subjects that could be selected, to undergo the fierce ordeal of this poisonous fever. They consisted of young half developed boys, whose delicate frames indicated that they had never enjoyed robust health. The fever was generally preceded by prodromic symptoms, which were soon followed by a marked chill, and then other symptoms ensued which characterized the disease. The countenance became dusky, the skin was hot and dry, the tongue red at its tips and edges. Epistaxis was a frequent occurrence, and the pulse ranged between 90 and 120. The patients complained of intense pain in the back and limbs, and also of a dull headache. There was, in fact, but a slight variation from ordinary typhoid cases. In but few instances were *taches rouges*, petechiæ, or sudamina noticed, and the glands of Peyer apparently remained intact throughout the course of the fever. The force of the poison was evidently expended on the brain and nervous system, and the consequence was, that the fever left its victim almost a complete wreck in strength and vitality.

In the treatment of these typhoid cases, Dr. Sloan and myself relied upon small doses of calomel, opium, and quinine, given in powder three times a day. Dr. S. had previously found great benefits arise from the use of this combination, in a military hospital during the Mexican war. Our patients were placed in well ventilated rooms, and every attention was paid to cleanliness and faithful nursing. Stimulants and a nourishing diet were employed as adjuvants. Local bleeding, counter-irritation, evaporating lotions, and sponging, were used as they were indicated. In cases of obstinate vomiting, small doses of chloroform were given, and when arrested, the calomel, quinine, and opium was substituted. Out of six hundred and thirty-three prisoners of the line, at least seventy-five were continually under treatment, and of this number the greater proportion labored under typhoid fever. In this seventy-five, I do not include the convalescents, who were very numerous, and were constantly requiring attention. The depressed spirits of our patients, caused by "home sickness," retarded very much their rapid recovery, and often had a tendency to influence a fatal result. Notwithstanding this serious obstacle we met with fair success, for during a period of two months we lost but twenty cases, some of whom died rather from exhaustion than the fever itself.

The order, concentrating from various parts the political and war prisoners at Fort Warren, Boston Harbor, was issued in the latter part of October, and was immediately carried into effect. The order gave me but short notice to obtain a suitable supply of medicines, stores, and bedding, for about sixty patients, who it was thought would be benefited by the change. The Medical Purveyor of New York (Dr. Satterlee, U.S.A.) promptly furnished me a field supply of these articles, and as the fort had been garrisoned by Massachusetts Volunteers, it was supposed the hospital there would be more or less provided. Unfortunately, the volunteers, on evacuating the fort, had carried away or expended most of the supplies, leaving only a sufficient quantity for the use of the mechanics and laborers engaged on the works; therefore, until additional supplies could arrive from New York, there might have been some just cause of complaint. The able and indefatigable surgeon-general of the State of Massachusetts, together with the truly charitable citizens of Boston and the vicinity, offered every assistance and sent comforts to the sick prisoners of war, which tended to alleviate their helpless condition. It would be foreign to my purpose for me to herein mention individual instances of philanthropy and sympathy, extended towards a suffering enemy, as it has been my pleasure to here witness them; therefore, let it suffice for me to say that the sick under my charge fully appreciate this kindness, which to them was unexpected. The voyage on the transport to this place occupied one day and a half, was pleasant, and proved not in the least injurious to the sick. On first arriving at Fort Warren, typhoid fever raged with its accustomed vigor among the men, but it gradually slackened, as they were better provided for in their quarters. The lessening of the number of typhoid cases was followed by the appearance of the mumps, which affected nearly all the men in command, yet in every case it has thus far yielded to a mild treatment of laxatives, fomentations, and diuretics. The diseases most prevalent at Fort Warren are—typhoid fever, mumps, pneumonia, bronchitis, rheumatism, scabies, and debility (the result of previous sickness).

After our arrival here, it was ascertained that several of the twenty-six prisoners, necessarily left in the hospital on Governor's Island, had been attacked with small pox. The knowledge of this fact caused me to thoroughly examine all the prisoners of war to ascertain if they had ever been vaccinated. To my surprise, I found that this important matter had, in the majority of persons examined, been neglected. Having procured through the proper sources sufficient virus, I had the prisoners vaccinated. So long a time of probation has intervened since our departure from Governor's Island and our arrival here, that I feel confident we have miraculously escaped this most loathsome disorder. Although the number of prisoners now held at this fort is far greater than the number confined on Governor's Island, yet sickness has been steadily on the decrease, and its severity is now limited to but a few cases. During a period of six weeks there have been at the fort only four deaths, and one of these occurred among the regular guard of the island.

The greater part of the political prisoners are located in quarters similar to those used by United States officers. They are treated with great humanity, ample room is given them to exercise in, and generally they enjoy excellent health.

Yours etc.,
Dewitt C. Peters, M.D,
Dec. 16, 1861. *Assist. Surgeon, U.S.A.*

Medical News.

Two Deaths from Chloroform.—*Case* 1.—I was requested by Mr. Field to administer chloroform during an operation for the removal of internal piles by the écraseur. The patient was a large, stout, very muscular man, aged 50; the abdomen was prominent; and the countenance that of a man accustomed to drink, but not indicating any abnormal condition of the heart, or any other organ. There was no arcus senilis, and the pulse and respiration appeared natural. Two measured drachms of chloroform poured on a hollow sponge were first inhaled in the usual gradual manner. The stage of excitement was strongly marked, with much muscular action and vociferation. After several minutes, the chloroform being exhausted, forty or fifty minims more were poured on the sponge, and inhaled at intervals. While the vociferation and struggling yet continued, some stertor appeared, and the sponge was at once withdrawn. In another minute, full stertor came on; the face, without any pallor, showed a dusky livid hue, the pulse ceased, and the respiration was becoming visibly slower. Mr. Field had not begun the operation. We instantly commenced artificial respiration, and slapped the face and chest with a wet towel, but only a few more inspirations, or gasps, could be obtained. We continued the same means, took blood from the jugular vein, which was turgid, rubbed the limbs, and applied electro-magnetism, with the kind assistance of two other medical men; but after the lapse of an hour, no sign of life being elicited, and the body becoming cold, further efforts were evidently useless. On a *post-mortem* examination, the heart was found loaded with fat, its muscular substance thin and weak, and the walls of the right auricle and ventricle in a state of fatty degeneration. These same cavities (the right) were gorged with fluid blood. The valves and great vessels were healthy, and no other organ appeared to be in any abnormal state. Death had clearly occurred from failure of the heart's action, induced much more readily than could have happened under natural circumstances by chloroform, owing to the weakened and encumbered condition of the heart. *Case* 2.—On November 19th, an inquest was held at Paddington, on the body of Edwin Hambly, aged eight years, whose death occurred while under the influence of chloroform. Mr. Edwards, chloroformist to St. Mary's Hospital, deposed that he had held that position for the last eight years. The deceased was admitted to the institution on the 25th of October to undergo a plastic operation to remove a great deformity, occasioned by a burn in the chin, which had the effect of drawing it down to an unusual degree, and turning the under lip inside out. On the Wednesday following, the day appointed for the operation, witness administered the chloroform gently. It took ten minutes to get the boy under its influence, and then the operation was commenced by Mr. Lane, the senior surgeon. Just before the conclusion deceased fainted, and, with a view to restore him, witness promptly commenced artificial respiration, which he kept up for half an hour. Failing in his efforts, he was put in a warm bath, and galvanism was applied for an hour and a half, but without success. Witness believed that the poor boy died instantly he fainted from paralysis of the heart. This was the first and only fatal chloroform case he ever had since the opening of St. Mary's Hospital, now over ten years, during which time chloroform had been successfully administered to upwards of 4,000 persons. In a *post mortem* examination they found all the organs healthy, and no trace of disease anywhere. Death was solely from paralysis of the heart from the effects of chloroform. He never had a case die before from chloroform. The strangest part of this affair was that, when death took place, the boy was apparently recovering from the effects of the chloroform. Other medical gentlemen who were examined fully corroborated the evidence of Mr. Edwards, and testified to his great experience and his remarkable caution in the administration of chloroform. The jury returned a verdict that the deceased instantly died during the performance of a surgical operation upon him from the effects of a failure of the action of his heart, occasioned by chloroform accidentally and by misfortune.—*British Medical Journal.*

Effects of Religious Excitement.—The annual report of the Irish Lunatic Asylum Inspectors states, that more cases of insanity occurred in Ulster in two months, during the late revival movement, than had taken place in the year. "Religious excitement" is assigned as the cause of insanity in 97 males and 86 females, but it is observable that, though religious excitement was the cause of the breaking down of the mind, the mania is not generally religious. The patient does not rave about religious subjects, but about matters totally different. The religious excitement, like any other violent epidemic excitement, caused the mind to give way in its weakest point, whatever that might have been. "Intemperance and irregularity of life" were the causes of the disease in 241 males and 82 females.—*Brit. Med. Jour.*

Cholera in India.—Up to this date not less than 500 English soldiers have fallen victims to cholera, chiefly in the military stations of Delhi, Meerut, Umballa, and above all, Lahore. The epidemic has now raged for six weeks. It showed itself first in a virulent form at Delhi and Meerut. This is the fifth visitation of the kind since 1842. The wave of pestilence has alternately swept down from Cabul to Eastern and Central India, and up from the East into Central Asia, following the Gangetic valley and the great commercial routes. Wherever it has attacked English soldiers it has spared the native troops and prisoners in the vicinity. The effect on the troops at Lahore has been most depressing. The Mean-Meer Brigade has been moved out of cantonments into camp. The medical men available have been overworked. Government, it is said, have appointed a commission of medical and engineer officers to inquire into the circumstances.—*Brit. Med. Jour.*

Physicians' Penmanship.—There should be a very clear understanding between physicians and dispensers; hence, when the latter complain that they have often the greatest difficulty in deciphering the hieroglyphics which are intended to guide them in preparing medicines ordered, that complaint deserves serious attention. It is needless to insist upon the evils of this imperfect understanding. They are very apparent. The statement has been made before; and since it is again urgently repeated, it must be concluded that there are many prescribers who habitually adopt an obscure and illegible hand in writing their formulæ. The time has gone by when kings and princes neglected their caligraphy, and when to write badly was an indication of learning or fashion, mainly because those who possessed neither quality could not write at all. To attempt to preserve this tradition is to interpret history badly, and to sacrifice to that interpretation a very clear duty. The opinion that such caligraphic obscurity as is complained of is the deliberate consequence of a foolish conviction, may be dismissed; it is more charitable and more just to assign it to hurry and want of care. Physicians cannot all be exquisite penmen; but perfect clearness and accuracy may always be obtained at the cost of a little care, and no less can be expected where the opposite qualities may be so dangerous.—*Lancet.*

Lunacy in Ireland.—It appears that the number of persons more or less afflicted with mental disease still at large is 7,120. Of these, 5,469 are idiotic, and 1,651 are insane. Idiotcy prevails more amongst males than females, the number of the former being 3,148, and of the latter 2,321. Among lunatics the difference is not so great, the numbers being 866 males and 785 females. There are 2,534 lunatics and epileptics in workhouses. During the years 1860 and 1861 the number admitted into the district asylums is 2,575, of whom the large proportion of 1,201 have been completely restored to health. The average number under treatment has been 8,411. The proportion of recoveries on the number admitted is about 47 per cent.; on the whole number under treatment it is 14·27. The reason of the difference is that those patients who are really curable are restored, under judicious treatment, in the course of the first three or four months, if they are admitted in time. If not, these cases are almost hopeless. Where the origin of the disease is known, it is traced to hereditary transmission in 37 per cent. of the cases. The hereditary mental taint gradually wears out by intermixture of blood. Among married lunatics, wives are more numerous than husbands. More than half the insane—56 per cent.—are uneducated.—*Brit. Med. Jour.*

Ethics of Vivisections.—Useless barbarities cannot be reprobated too strongly. The most accomplished physiologists are also the most humane; but a wide latitude must be left to each man, who will be individually responsible for the use which he makes of this power. Bell grieved over the rabbits which he sacrificed; and Dr. Brown-Séquard regarded with almost the affection of a parent a pet guinea-pig in which he had succeeded in artificially producing epilepsy; that guinea-pig, in fact, contributed greatly to the progress of medical science, and was worthy of his affection. Marshall Hall first removed the brain of his frogs, thus destroying all consciousness, before proceeding with his experiments on the diastaltic function.—*Lancet.*

Original Lectures.

CLINICAL LECTURE ON REMITTENT FEVER.

DELIVERED AT THE NEW YORK HOSPITAL.

By H. D. BULKLEY, M.D.,
ATTENDING PHYSICIAN.

Few places afford a more favorable opportunity for the study of the different forms of malarial disease, with its sequels and complications, than this hospital, as our wards are seldom if ever without some of its various forms; and during the summer and fall months contain them in abundance. A steamer seldom arrives from Aspinwall without furnishing a greater or less supply of cases of remittent fever, to which additions were frequently made in former years from the southern ports of our own country.

In looking over notes on this subject taken last year, I find a record of some facts of interest, and one case of complication of remittent fever which is of quite rare occurrence.

Six cases of this form of fever were received in the course of about one week from Aspinwall, by the steamer North Star, which arrived at this port on the 12th of July, 1860, after a passage of eight days, having remained at that place five days. The definite and often abrupt manner in which this fever makes its attacks enables us frequently to fix its period of incubation with some accuracy. Of these six cases, two were attacked two days before the arrival of the vessel; two on the day of the arrival; one four, and one seven days after the arrival. The period of incubation of this disease has been differently fixed by different writers, and varies between the two extremes of a few hours and several months; but in a large proportion of cases from this particular locality, the time varies from five or six to fifteen or twenty days, depending doubtless upon the extent and length of exposure to the poison in different cases, the degree of exposure to exciting causes of disease, as cold, errors in diet, excesses of different kinds, etc., and strength of natural constitution. Many are attacked a day or two before they arrive, but a larger number soon after they get on shore; but on this point I propose to collect more extended statistics in future.

Of these six cases, two proved fatal. The first of the fatal cases was that of a well developed man, thirty years of age, who was attacked with pain in the head, vomiting, and diarrhœa, one week before he entered the hospital, and who, when received, had a cool skin, and slow and weak pulse, with a strong tendency to collapse, which went on increasing until it terminated his life at the end of three days, notwithstanding the most active means were used to produce reaction. There was no delirium nor any convulsions, but his memory was impaired, and his mind labored heavily, and he found it difficult both to comprehend and answer questions. A similar case of impairment of the intellect, with marked tendency to coma, slow pulse, and cool skin, occurred in another case, a stout, well developed man, who entered the hospital on the 20th of July, but his symptoms gradually yielded to the persevering use of remedies, and on the 30th he was sitting up.

The second fatal case presented two complications, both serious in their character, and one of them very rare in its occurrence. These were convulsions and suppurative inflammation of the parotid glands on both sides, and of the cellular tissue about them. The convulsions took place three days after admission, which was eleven days after the attack of fever, and continued at intervals for about forty-eight hours, and then passed off, leaving him entirely conscious, and, as he said, without headache, and with a pulse about natural. On the following day, he complained of soreness under each mastoid process, which part was somewhat irritable and tender on pressure. His general condition was then good, and there was no return of convulsions. The swelling of the glands rapidly increased, so that at the end of two days there was great tumefaction on both sides, with severe dyspnœa, and considerable difficulty of swallowing. There was also at this time a tremulous state of the muscles of the hands and arms. Consciousness was perfect. On the day before his death there was marked tenderness on pressure upon the swellings, and a part of the surface was of a dull red color, and the aspect was that indicating the presence of matter underneath, though none could be detected by my colleague, Dr. Parker, who saw him by my request on that day. Nor did his symptoms at that time seem to be sufficiently connected with the mechanical effects of the swelling to warrant, in the opinion of Dr. P., any surgical interference.

On examination after death, both parotid glands, and also the surrounding areolar tissue, were found to be infiltrated with pus, so that it could be pressed out from them, although it did not flow out upon cutting into the parts. The spleen was large and soft, as it usually is in this disease, and the liver presented that bronze color which is considered pathognomic of bilious remittent fever, and one of the diagnostics between this and yellow fever, in which we have the light yellow or fawn colored liver. The kidneys and liver were both found fatty. There was moderate congestion of the brain, which probably occurred during the last hours of life. It is possible that the convulsions were connected with a fatty state of the kidneys, which was well marked, though there was no dropsical effusion at any time discovered, nor was the urine examined for albumen. It ought to be mentioned in connexion with this case, that he was ascertained to be a man of intemperate habits.

Cases of parotideal swelling are not uncommon in typhus fever, but, according to my own experience, and so far as I can learn from others, they are extremely rare in bilious remittent fever. I can recall only one or two instances, among the rather large number of cases of this disease which my connexion with this hospital has afforded me an opportunity of seeing during the past thirteen years.

During the period included between the last day of August and the last day of October, of the present year, both inclusive, there have been received in the hospital thirty-eight cases of malarial disease, of which twenty-seven were cases of remittent fever, formerly called Chagres fever, and eleven were cases of intermittent. This number, although below the usual average for these months in former years, in consequence of the diminished supply from our southern states, has afforded a good opportunity of studying these diseases in different forms of severity, and in a variety of phases. Of these, seven cases of remittent, and one case of intermittent, were furnished by one steamer from Aspinwall, on the last days of August and the first four days of September, and ten cases of remittent, and two cases of intermittent, by another steamer from the same locality, between the 5th and 16th of September inclusive, making more than one half from the same place, by two steamers, within the space of seventeen days; and within four days afterwards two other cases of remittent were received from the same place by another steamer, making twenty-two out of the thirty-eight. The other cases came from different localities not noted down at the time of their entrance, and probably some of these were from that same fertile source of this poison.

Of the whole number of cases not one proved fatal. The twenty-two cases (nineteen remittent and three intermittent) received from Aspinwall during the last day of August and the 16th day of September, were nearly all discharged cured by the 1st of October, or within a few days afterwards, except one, in which the patient exhibited symptoms of phthisis during his convalescence from the fever, and was still in the hospital at the end of October, and all were discharged by the end of the month except seven; and of these, six were received on or after the 22d of October.* Three of the patients with remittent fever had a relapse and returned to the hospital for treatment, one within a day or two of his discharge, one at the end of six days, and one at the end of seven days.

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* Another one was discharged cured on the 2d of November.

Most of these cases were of a mild type, as might be inferred from the result of treatment, but there were a few threatening cases of collapse, and a few of a typhoid character. It was interesting to note the different forms and phases of the disease presented by those from the same steamer, and, of course, exposure to the same cause. In our first group of eight cases, we had, and nearly all in the same ward, seven cases of remittent and one case of intermittent fever; and of the remittent cases could be seen in one day a type case of the collapse form, a marked specimen of the typhoid form, a third just passing into the typhoid state, and others of the mild and simple type. One presented the peculiar anæmic complexion produced by the malarial poison, with a cool skin, slow pulse, moist and pale tongue, and partial hebetude from sluggish action of the brain, while others exhibited the hot skin, thirst, frequent pulse, etc., of the simple kind, and others the dry and brown tongue, rapid and feeble pulse, relaxed and moist, and sometimes cool skin, and the occasional delirium of the typhoid variety. There were no cases of convulsions among the whole, and but one or two cases of active delirium. The afternoon or evening exacerbations were well marked in most of the febrile cases. Quinine was the only remedy upon which reliance was placed, the use of which was commenced in some cases at once, and in all cases as soon as the condition of the patient would allow it. Preparatory treatment was used according to the indications, which varied in different cases. When the skin was hot and dry, spiritus mindereri, with or without sweet spirits of nitre, was given for a day or two before commencing the quinine. When there was irritability of the stomach, either with or without vomiting, sinapisms over the epigastric region, with small pieces of ice at short intervals, were usually found to allay this symptom. When the bowels were costive, and especially when the tongue was much furred, and the strength of the pulse was good, a dose of eight or ten grains of calomel was given, followed by castor oil, or some saline purgative. When the stomach and bowels were in a condition to receive it, quinine was given in doses according to the urgency of the periodic symptoms, varying from one or two to five grains every three hours, and sometimes every two hours for a short period. When the stomach would not retain it, and the symptoms were urgent, we have given it by injection, but did not have to resort to this mode of administration during the present season. Beef tea and chicken broth were given as soon as the stomach could receive and retain them. In the typhoid cases, stimulants were used more or less freely according to the urgency of the symptoms, in the form of either wine whey, milk punch, or brandy. When the skin was cold, the hot air bath was employed to assist in bringing on reaction. The quinine was always used in solution. When the periodicity of the disease ceased, iron, in combination with the compound tincture of gentian or of cinchona, was substituted for the quinine. The form which I have most commonly used is the ammonio-citrate, of which two or three grains are usually given, three times daily, in one or two drachms of one of the above tinctures. No instances of enlargement of either liver or spleen were noticed in any of these cases of sufficient importance to call for the special treatment necessary in such cases.

The case of phthisis referred to illustrates the importance of watching the convalescence of acute cases of disease to see that it progresses according to the usual laws of the disease. This patient had been carefully watched and pointed out as a specimen of the typhoid form of remittent fever, and had begun to convalesce from that. After a few days of marked convalescence, it was noticed that he was beginning to fall off. He appeared more feeble, his pulse was more frequent, he had a slight cough, and on examining for the cause of this retrograde state, auscultation revealed the existence of feeble respiration, prolonged expiration, and mucous crepitus under the right clavicle, while percussion showed moderate dulness over the same part, a combination of symptoms which, especially in connexion with the rational signs, led to the diagnosis of incipient phthisis. He was immediately directed to take iodide of iron and cod-liver oil, and was apparently improving slowly at the end of October.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. X.

For the congestive and catarrhal disorders of the cystic mucous membrane, and especially that congestion about the neck of the *bladder* in both sexes which gives rise to such tormenting dysuria, sometimes amounting to positive strangury, and which especially embitters the existence of its commonest victims—women about the turn of life—Marienbad, Kissingen, Vichy, and Carlsbad, have each their fields of usefulness. Where Kissingen agrees, I prefer it; and have seen again and again the most satisfactory results from its use. It regulates the bowels, effaces the hæmorrhoidal diathesis which lies behind most of these complaints, improves nutrition, and often restores robust health. There is a mild sulphur water, Weilbach, of admirable efficacy in this class of cases, where nothing stronger can be borne; and Adelheidsquelle of Heilbrunn, iodo-bromuretted alkaline common-salt, also enjoys a high reputation. For example: "a gentleman suffered eleven years from painful dysuria and urethral discharge, of hæmorrhoidal origin, which had resisted all treatment. He had to get up several times of a night to walk the room, to obtain relief from the violent pains in the urethra and bladder; frequent involuntary emissions adding to his distress. He was completely cured by a course of Adelheidsquelle, with an occasional use of Püllna (strong bitter magnesian) when his bowels were sluggish." I have successfully treated similar cases with the Vichy, Kissingen, and occasionally a week or two of the K. bitter, for the purpose of deriving from and somewhat depleting the portal system. Many of these cases, however, are rendered extremely obstinate by complication with derangements of the nervous system, especially the hypochondriasis connected with the diathesis, and the consequent tendency of the patient to concentrate his attention on the seat of his painful sensations.

In the hydro-mineral treatment of obstinate *blennorrhœa* in the male sex, we have little experience; it has been mainly conducted at certain sulphurous baths, the effect of which has been to reproduce the acute form of the disease, with subsequent cure. But in the class where the local disorder is kept up, or rather not cured, by reason of an anæmic condition, the stronger chalybeates are of acknowledged efficacy, and their internal use may well be conjoined with that of salt water baths, or of general and local douches. It should be borne in mind that the greater proportion of all superfluous saline material must necessarily pass off through the urinary organs, hence the importance of not overburdening or irritating them by a larger quantity than just requisite for the end in view, and that abundantly diluted. This consideration also helps us to understand the much greater value of some very weak waters than stronger ones in the treatment of the class of cases under review.

In considering the treatment of *diseases of the uterus* and its appendages, by means of mineral waters, we shall always have two important points to decide first: whether the uterine disease—engorgement, erosions or ulcerations of the neck, uterine catarrh—is a consequence of previous constitutional derangement, hæmorrhoidal, scrofulous, or rheumatic; or whether its persistence has entailed a state of anæmia, dyspepsia, or other cachexia, opposing the cure of the primary disorder. With regard to the first class, there remains little to be added to the general principles of treatment already enunciated; I have only to enter caution against proceeding too vigorously, remembering the peculiarities of the organ we are treating. Thus the chalybeate common salt waters, otherwise so suitable to the cure of many cases, if pushed too fast or too far, would be very apt to occasion hæmorrhage. In the most irritable subjects, mild glauber-salt, moderately chalybeate waters, or smaller doses of Adelheidsquelle, may be safely and very advantageously prescribed. In anæmic, chlorotic, or dyspeptic conditions the strong alkaline Vichy waters are largely prescribed by the French physicians. In dwelling on the way in which their reputation has been made, one must not forget the circumstances that Vichy is a *French* watering-place, a fashionable one, and one at which are not only extensive nosocomial institutions belonging to the state, but, during the season at least, some of the best physicians of whom France can boast. Even statistics from such sources do not tell *the whole truth;* and it is self-evident that in the last named class of cases the chalybeates and chalybeate alteratives are more surely indicated, as the Germans have abundantly proved. I will again quote in illustration from the papers in the London *Medical Times and Gazette*, March 23, 1861. "They (the waters of Kreuznach, chloride of calcium common-salt) seem almost to be a panacea in cases of chronic inflammation of the womb, the vaginal portion and the ovaries, which often causes the formation of neoplasms in those organs; also in that form of inflammation of the ovaries which follows parturition, and often produces sterility and a disposition to miscarriages. At the same time, the hysterical symptoms which almost invariably accompany such lesions, are cured. As displacements of the uterus often exist together with chronic inflammation of that organ, of course other remedies besides the springs have to be resorted to. Large fibroids of the womb cannot be expected to disappear; but if the waters are used for some time, not only are the troublesome symptoms produced by this disease relieved, but a further development of the tumor is prevented." The internal having in these cases been associated with an external use of the waters in the shape of douches and injections, we are left much in the dark as to the value of the remedy when used exclusively in the first-named mode. Rotureau observes that "the topical employment of the Kreuznach waters is of great service in all affections of the female sexual organs, in which it is desirable to give vitality and tone to the mucous membrane lining them, and of which the abnormally increased secretion often reacts in an injurious manner on a general health already too much debilitated."

The admixture of external with internal hydro-mineral treatment at Carlsbad, makes it equally impossible to estimate correctly the value of the remarkable waters of that station, as internal medicines, in uterine disorders. They enjoy a great reputation; and my own experience would lead me to expect more service from the internal use wherever there is a torpid state of system, or a rheumatic diathesis, while Kreuznach is indicated in the scrofulous. At the former springs, chronic ovaritis is almost always cured, ovarian tumors and cysts are discussed, or diminished; and in all cases great relief is obtained. The same is true of hypertrophy and fibroid tumors of the uterus, and simple engorgements of its body or neck, together with any menstrual disorders incident to either of these conditions. Its position and anatomical connexions would lead us *à priori* to expect that intimate connexion of affections of the uterus and its allied organs, with the hæmorrhoidal diathesis, which is illustrated every day by practical observations. Many a case of supposed disease of the womb, or even its appendages, is of hæmorrhoidal not uterine origin. Occasionally it happens that persistent treatment removes the more evident uterine engorgement, while not being addressed to the *fons et origo* of the morbid state, the patient remains an invalid, and the doctor wonders why she does not get well. In fact, a relapse of the uterine affection is pretty sure to follow, unless the primary disorder be remedied. When this is done, and it is often only possible by the aid of mineral waters, then first is a true cure accomplished.

The *metrorrhagia* of the turn of life is singularly amenable to treatment by the Carlsbad waters; for if dependent on a change in the quality of the blood, due to a suppression of the accustomed menstrual discharge, this will be supplemented by increased activity of the whole apparatus of se- and excretion, and the blood restored to a wholesome purity; if on hepatic congestion, as so common, that will be entirely relieved.

The *menorrhagias* are also under control by the same means; "patients who at the commencement of the cure could not take the slightest exercise without experiencing an increase of hæmorrhage, at the end take long walks afoot with impunity."

Dysmenorrhœa is equally amenable to thermal treatment; but the cold chalybeate, common-salt waters are preferable in the majority of cases, as more manageable, less dangerous, and requiring less care after the cure. There are some cases, however, especially if occurring in the rheumatic diathesis, which, resisting most other waters, yield to the use of Carlsbad alone.

In cases of *amenorrhœa*, whether of suppression or merely undeveloped functional activity, the constitutional condition affords the guide to practice. The latter form is almost invariably a sign of want of vigor, and requires the ferruginous common-salt waters, which may be called specific in such cases; and the more rich in carbonic acid gas, the more efficacious will they be found. Where the irritability is excessive, it may be necessary to premise a sedative treatment, with Marienbad or Egra for example. The first named form requires more nice discrimination of causes, and consideration of possibly co-existing pathological conditions, requiring perhaps sedative, perhaps derivative treatment. In either case, general principles will readily afford a guide to the choice of water.

The term *leucorrhœa* is applied to a range of disorders, probably in essence always catarrhal. Like similar affections of the respiratory mucous membrane, they may succeed previous acute inflammation, or be a local development of some general diathesis, as the scrofulous or hæmorrhoidal. It may be also symptomatic of organic lesion, or it may be supplemental to the menstrual discharge, that is, be of the nature of a flux. Little need be added regarding the choice of waters. The alkaline, soon followed by the strong ferruginous common-salt, or the strong bromo-ioduretted, is a good routine. The first increase but render thinner the discharge, and, as it were, direct the efforts of the *vis medicatrix* to the desired locality; the two others derive and strengthen, and correcting morbid states of constitution, put nature simply in a condition to effect the delayed cure. In the case of high colored plethoric women, care is requisite in prescribing chalybeates; a magnesian bitter every morning, and Vichy during the day is appropriate, at least until no further progress is made, when a cautious use of the former may be commenced. Carlsbad proves of great service in these cases, and there are few of our American women with whom Kissingen does not agree and prove curative.

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.,

PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(*Continued from Page 399.*)

Since the last record Case LXXX has remained perfectly well. Soon after that report she took chloroform for a dental operation involving destruction of the nerve in a molar tooth. Perfect anæsthesia was induced without the slightest unfavorable effect. A case precisely similar to this is recorded by Dr. Snow, in which no anæsthetic was used. (Snow on Anæsthetics, p. 329.)

Case LXXXI.—*Forceps for Delay—Still-born Child—Death of Child and Difficulty in Delivery believed to have been due to the Encircling of the Neck by the Funis.*

Margaret Bradley, single, æt. 26, first pregnancy. In labor from Feb. 12th, at 2 P.M., until Feb. 15, 1861, at 1.45 P.M. Presentation L. O. A. First stage forty-eight hours; second, twenty-three hours and forty minutes; third, five hours. Still-born male child, weighing seven and a half pounds. Bellevue Hospital, Drs. Mason and Rives, House Physicians.

This patient stated that the waters had dribbled for several weeks before delivery, though great confidence was not placed in any of her assertions. The fœtal heart was last heard in the evening of the 14th, and could not be detected in the careful examinations made subsequently to that time. No movement of the child could be appreciated for twenty-four hours before delivery. As it was evident that there was nothing more to be expected from the uterine efforts, I decided upon delivering her with the forceps. The three days of labor had not produced exhaustion, nor evidences of danger to maternal tissue, but the head absolutely failed to advance. The hand introduced well within the vagina showed that the head was in the superior strait partially through the brim, and not wedged, impacted, or arrested by any condition depending on faulty ratio of size between it and the maternal pelvis, or by any cause which could be appreciated. The mother's abdomen seemed of greater size than is usual with children of this weight. The forceps were readily introduced in the customary manner in such positions—one blade in front of the left synchondrosis, the other behind the right acetabulum, and readily locked, though their relations to the oblique diameter of the well-developed fœtal head required that the pivot should be pushed to the highest hole. The first tractions were promptly successful in completing descent and rotation, but they had to be very forcible to draw the head well on the perineum. This appeared to me to be a perineum very likely to tear, and I accordingly withdrew the forceps in accordance with Madame Lachapelle's advice (though in my experience this is of the rarest necessity), and completed delivery of the head with the aid of two fingers in the mouth and firm traction on the superior maxillary bone. The funis was twice around the neck and entirely pulseless, so that no doubt was left concerning the death of the child, and I drew forcibly on the head without advancing the body. Introducing my hand within the vagina, I found the shoulders in the brim, and drew down the posterior arm with much effort, fracturing it designedly to facilitate the manœuvre, after which the delivery was effected and the placenta came away almost immediately. The perineum was now found lacerated in a jagged manner, so as to slightly involve the lower part of the septum. This occurred subsequently to the withdrawal of the forceps, and was immediately sewed up with silver wire, but without the slightest effort at repair. The action of the sphincter ani was entirely unaffected. The scalp, face, and ears of the child were livid from congestion, the marks of the funis white, and the skin below of the ordinary color. No examination made of brain. Funis one yard long.

In this case it has always seemed to me that the delay occurred from retention by the funis, the gradual tightening of which during the labor I believe to have caused the child's death. In support of this view, I point to the evidences of strangulation observed in the child, and the steady increase of tractive force required as the fœtus was advanced. The difficulties depended on no disproportion of size or faulty position of head, shoulders, arms, or any other part of the body, as these points received my full attention during the manipulations described, nor was there any spasmodic irregular contraction of uterine fibres. Especially did I examine the position of the arms preparatory to deciding on bringing one of them down in the manner described, as the displacement behind the neck was forcibly brought under my observation by the kindness of Prof. Simpson in taking me to the case described in the *Edinburgh Monthly* for April, 1850. The length of the cord in this case would seem to have been sufficient for a natural delivery, but it is probable that even a funis of such length may prove a cause of delayed labor. It requires about twenty inches of funis to furnish two coils for the neck, and the remainder may very well be so disposed around the child's body as to impede the advance of the head, especially if the placenta should be attached to the fundus uteri. The mother died September, 1861, in the hospital, from an attack of diarrhœa, her health never having been restored after her confinement. There is no history of her case.

Case LXXXII.—*Prolapse of Funis—Fate of Mother and Child—Interesting Autopsy of Child—Intra-Uterine Ascites and Hydrothorax—Apoplexy.*

Mary Mathews, æt. 27, married, fell in labor for the fourth time on the 10th of Nov., 1861, at 2 P.M., in Bellevue Hospital. Previous labors natural. At 6 P.M. the membranes ruptured and the cord prolapsed. The House Physician, Dr. Vedder, could not readily succeed in replacing the cord, and sent for me. I found the patient placed in the position recommended by Dr. T. G. Thomas, of this city, with a large loop of pulsating funis in the upper part of the vagina. The os uteri was fully dilatable, the arc of the parietal bones just dipping within the brim of the pelvis, and the fœtal head quite movable. Pelvis well formed. My first care was to determine from which side the funis prolapsed, a point in my opinion of practical importance; since by endeavoring to return the loop on the opposite side it might thus be tightly drawn over the presenting part of the child, and danger follow, even though on that side there might be a greater amount of space between the presenting part and the pelvic brim. Finding that the cord had prolapsed on the left side of the pelvis, I proceeded with great gentleness to press it down the inclined plane, and succeeded in doing so to the level of the pelvic brim, when, as in two other of my published cases, it was again driven up hill into the vagina by a strong uterine contraction. Leaving the woman in the same position, I prepared myself to deliver promptly with the forceps if the manipulation should fail, and this notwithstanding the position of the fœtal head. Re-introducing, as before, my entire hand within the vagina, I again gently recommenced the manœuvre, and this time pushing the head to the right side of the pelvis carried my hand beyond the cranium, and only left the cord when on a level with the fœtal chin. Before dropping it, as is always my custom, I satisfied myself by pressure between the fore and middle finger that the pulsations were good and strong. It did not again prolapse. On the 11th, at 4 A.M., the fœtal heart pulsations were distinctly heard by Dr. Vedder—eight hours after the replacement. At 2 P.M. of the same day she was delivered by very powerful uterine contractions of a still-born male child, weighing nine and a half pounds, and splendidly formed. Dr. Vedder states that there was a long interval between the birth of the head and that of the shoulders, as there often is in these labors where very powerful uterine contractions have been necessary to force the head through the straits, and as the shoulders came into the world Dr. V. remarked that the funis was doubled and placed in front of the breast. Length of cord normal. Placenta normal. Microscopic examination by Prof. A. Flint, Jr. Dr. V. inflated the lungs, but to no purpose. I saw the child two hours afterwards, when its head was markedly livid, and on flexion fluid blood ran from the nose. On the following day an autopsy was made in presence of the class by Dr. Teats, Assistant Curator of the Museum, and in order to diminish as far as possible all appearances of cerebral congestion, I requested him to open the other cavities first. When the peritoneum was opened, it appeared to be about half full of a sero-sanguinolent fluid containing no lymph or pus. There was no false membrane anywhere within the abdomen, the organs of which appeared healthy, with the exception that the liver was somewhat darker than usual. Both pleuræ and the pericardium were from one third to one half full of a similar fluid, without token of other inflammatory action. The lungs crepitated, and the thoracic viscera were well formed and healthy. Dr. Vedder had inflated the lungs. The child never gasped. On removing the calvarium and dura mater, the scalp was found to present the customary congestion and jelly-like appearances in the caput succedaneum. No effusion between the cranium and dura mater. Vessels of convex surface of hemispheres remarkably congested and a thin sheet of currant-jelly-like blood posteriorly over the convex surface of each hemisphere. The same extravasation had occurred at the base over the lower part of each posterior lobe; but there were no other clots, though the puncta vasculosa, choroid plexus, and all the cerebral tissues witnessed to the violence of the congestion.

The case affords a happy illustration of the success which will attend the patient use of the manœuvre proposed by Dr. T. G. Thomas, and although unsuccessful is not the less adapted to prove its advantages in a class of cases in which the majority of practitioners would be unwilling or unable to resort to instrumental delivery. In considering whether, in such difficult cases, a porte-cordon might not prove of assistance in the necessarily deep depression of the cord, I incline to the belief that the advantages would be more than counterbalanced by the deprivation of the power to determine at the last moment whether or not the pulsations continued. If, however, a case should chance to occur in which the cord had to be carried thus deeply within the uterus, and the presentation interfered with proper manipulation, the porte-cordon might prove useful.

The cause of the effusion into the thorax and peritoneal cavity, and the period of its occurrence, are problems not easy of solution. It is not likely that the cord suffered any great compression during the time of its prolapse, nor during that required for its reposition, while such pressure as it might have been subjected to would of course have been materially expended on its vein, and have thus deprived the child of blood, and diminished the tendency to congestion. The apoplectic effusion probably occurred during the passage of the head through the outlet, when Dr. Vedder remarked that the expulsive pains were as strong as he should ever expect to see them, and all their force needed; or it might have occurred after the birth of the head, during the interval which elapsed before the birth of the shoulders—or from both of these causes combined.

If the effusion be admitted to have occurred during intra-uterine life from causes not entirely appreciated, then certainly the case affords a happy illustration of the value of post-mortem examinations of still-born children, as otherwise such a condition must have passed without suspicion—if indeed the death were not simply assigned to prolapse of the funis. The mother died from puerperal fever, which then existed in the hospital.

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Engorgement of the Bronchial Glands in Adults as a Cause of Asphyxia.—M. Fonssagrives having presented to the Société Médicale des Hôpitaux an essay on this subject, M. Woillez gives a report thereon, embodying an outline of the essay. In children, engorgement of the bronchial glands is of tuberculous origin—it is bronchial phthisis, which may, however, be simulated in exceptional cases by enlargement of the thymus. But in adults, independently of various tumors in the mediastinum, the bronchial glands may be hypertrophied or engorged without tubercular influence. Four forms are described:—1. Tubercular engorgement; 2. Melanic hypertrophy; 3. Hypertrophy of the tissue of the glands; Cancerous engorgement.—*Brit. Med. Jour.*

Progress of Medical Science.

PREPARED BY P. F. C. DESLANDES, M.D.

Of the Soluble Preparations of Chloroform against Biliary Calculi and Hepatic Colics.

Following the example of Durande, practitioners have often used ether mixed with the essence of turpentine against biliary calculi. The therapeutic effects of Durande's mixture have been variously explained; some attributed these effects to the dissolving chemical action of the mixture on the elements of the biliary calculi, others to the anti-spasmodic action of ether, and lastly some to the result of these two modes of action combined. We summed up and discussed these diverse opinions, six months ago, on the occasion of a case of biliary calculus in the service of M. Briquet at La Charité.

However it be of the way of acting of this remedy, it is certain that it has given in practice results satisfactory enough to induce some physicians to try, by new improvements, to insure the future of this method. Such is particularly the end M. Bouchut had in view in substituting chloroform for ether in the composition of the mixture in question.

M. Bouchut has ascertained by experiment that chloroform and ether, in equal doses, dissolve unequally the calculi submitted to their action in a vase. He has found out that in twenty-four hours half a yellow biliary calculus has been dissolved by ʒ ss. of a solution of chloroform, forming a deep yellow liquor, whilst the other half of the calculus, placed in a solution of ether, was hardly attacked, and the liquor almost colorless.

This result has induced M. Bouchut to use the aqueous solution, and the elixir of chloroform in hepatic colics due to biliary calculi, and in the only case in which this remedy has been used, its action seemed to have been quite successful. This is the case:

M. V., of a sanguine temperament, had never been sick, when in 1857 he was attacked with a diarrhœa which lasted several months, and obliged him to follow the most strict diet. He was cured in 1858, when he was taken with a violent attack of gastralgia, without fever, with mucous vomiting followed by a little jaundice. The attack lasted two days, and disappeared.

New attacks very similar returned at a few months' interval, for a few days, giving rise to some tenderness of the epigastrium, and momentary general disturbance.

In the month of November, 1860, for the sixth or seventh time, sharp epigastric pains irradiating to the right hypochondrium, came on suddenly during the night. They were accompanied by great tension of the abdomen, and increased by pressure. Their intensity was such that the patient rolled about in bed uttering cries. They ceased sometimes for a few minutes, and reappeared shortly after with the same violence. Efforts of vomiting brought out a small quantity of mucus. The face was pale, deeply altered, the eyes hollow, and a slight yellow tint covered the sclerotica and the skin; no passage for two days; tongue natural, thirst rather frequent, no fever.

These pains lasted two days, and were calmed by opium in different forms. After they had ceased the patient was placed to the use of the syrup of chloroform so as to take ʒ ss. of chloroform in a month. The remedy was then interrupted, and replaced by the Vichy water. At the end of a month the Vichy water was replaced by the chloroform, to the dose of grs. xv. a day, which was continued again for a month to be thus given up and resumed from month to month until this day.

The disease for seven months that this treatment has been instituted has given no sign of its existence.

M. Bouchut's researches on the therapeutic effects of chloroform taken in the interior have not been limited to the treatment of biliary calculi; in a little work he has just published on this subject he mentions a series of experiments which, although they do not attain the end he had in view, have nevertheless given results worthy of interest.

Being desirous to verify what has recently been written on the solution of chloroform in glycerine as a proper means to facilitate its use internally, he has found that chloroform is not dissolved in that agent, where it remains in suspension. But it dissolves very well in alcohol, to the proportion of one part for eight. With this solution M. Bouchut has had a syrup of chloroform prepared as well as a wine and a water to be used internally as a drink or injection. These diverse preparations tried on persons in good health and on sick ones have never produced anæsthesia, but by their action on the nervous system it has seemed to him that they might have some useful applications. He has administered them by the mouth or the rectum, to patients suffering from chorea, epilepsy, and neuralgia. Of four cases of chorea thus treated for a few days, one has derived marked advantage; of three cases of epilepsy, one has momentarily lost the symptoms of the disease. In several cases of neuralgia there has been a complete cure.

The following are M. Bouchut's soluble preparations of chloroform:

Chloroform ptisan.—Chloroform, grs. xv.; alcohol, grs. cv.; water, Oj. ℥-xv.- ʒj.-♏xliii. To take by glassful in the twenty-four hours, against hepatic colics, chorea, hysteria, epilepsy, and nervous diseases.

Vichy water with chloroform.—Chloroform, grs. xv.; alcohol, grs. cv. For one bottle of Vichy water, against hepatic colic.

Syrup of chloroform.—Chloroform, ʒ ijss.; alcohol, ℥ ij.- ʒ v.; simple syrup, ℔. j. To take by tablespoonful, from three to six in the twenty-four hours. Hepatic colics and nervous diseases.

Chloroform mixture.—Chloroform, grs. xv. to xxx.; alcohol, ℥ ss.; gummy julep, ℥ iv. To take in the twenty-four hours, in the same cases as above.

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SUPPLY OF ATMOSPHERIC AIR TO PUBLIC BUILDINGS.—The Commission appointed to report on the question of warming and ventilating the Palais de Justice, Paris, comes to the conclusion that the following quantities of atmospheric air should be supplied per hour for each individual placed in the respective localities: Hospitals, day and night, 80 cubic mètres; during the period of dressing the surgical patients, 120 mètres; and during an epidemic, 150 mètres. Laboratories, 60 mètres. Barracks, during the day, 30 mètres, during the night, 60, and during epidemics, 120 mètres. Prisons, 60 mètres. Amphitheatres, theatres, and assembly-rooms, 60 mètres. Schools, 30 mètres.—*Presse Belge*, No. 48.

A WORD OF CAUTION TO THE WEARERS OF ARTIFICIAL FLOWERS.—Arsenite of copper has of late years been extensively used as a coloring material in various articles of commerce. The consequence of this has been that those who are employed in the manufacture of those articles, as well as, in many cases, those who have made use of the manufactured articles, have suffered from the effects of arsenical poisoning. In France and in Germany, the attention of the authorities has been called to the serious injuries inflicted on the health of those employed in these manufactures, and means have been taken to protect the workmen against the dangers attendant upon their work.—*Brit. Med. Jour.*

L'IMPARTIAL DU NORD informs us that, on Oct. 29th, seven soldiers ate a number of mushrooms which they had gathered in a wood near Mauberge. They were immediately taken ill; six of them died, and the seventh was in a fair way of recovery. On Oct. 21st., we also learn that an artist, M. Lucien, and all his company, very nearly fell victims to a similar repast which they had made on the road from Boir to Ussel.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, DECEMBER 28, 1861.

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THE EVENTS OF THE YEAR.

IN closing the year we cannot forbear alluding to some of the more important events which have occurred in the history of our profession. Though not numerous, yet some are to have a lasting influence upon its future progress.

The first, and perhaps the most noticeable, is the contribution which the medical profession has made to the volunteer army, in defence of the Union. It is estimated that there are now not less than *fourteen hundred* surgeons in the U. S. Army, gathered from every section of the loyal states. While this corps is for the most part made up of recent graduates and young practitioners, it is nevertheless true that along the ranks are found many old and reputable physicians, who have exchanged large and lucrative practices, and honorable positions in society, for the less remunerative service of Government and the privations of camp life. The impulse of patriotism which has moved our brethren to these personal sacrifices should command our profound regard. They confer upon the profession to which they belong an honorable distinction among the various classes of citizens who have responded to the call of their imperilled country. In this connexion we cannot forbear to pay a passing tribute to the surgeons who have so manfully stood by their wounded and suffering in the hour of defeat, and have paid the penalty of their heroic devotion to duty by becoming prisoners of war. Brighter examples are not recorded on the fairest pages of history. No rewards are too great for their self-sacrifices, and no praise too fulsome for their humanity in the moment of trial. Many of them have been allowed to return again to civil life, while others have been consigned to inhospitable prisons, the next remove from which is the grave itself. Already one has yielded to the fate that awaits his companions.

The adjournment of the annual meeting of the National Medical Association was an event of some importance to the profession. For nearly a decade and a half had these sessions been annually held, and the good influences which they had exerted were every year more perceptible. The meeting in June was to have been in the commercial centre of the Great West, and many were the anticipations of a pleasant and profitable session. However necessary it may have been at that exciting period to omit the annual meeting, we have now become so accustomed to the din of war, that we trust the meeting in June, 1862, will soon be ordered at the same place.

The necrological records of the past year contain the names of many distinguished members who have left behind them examples of rare devotion to medical science, and the cause of humanity. Of the seniors the name of FRANCIS will ever stand prominently forward in American medical history. He was in many respects the best type of a versatile yet thorough and comprehensive mind which the medical profession can boast—being about the only link between our profession and the collateral branches of science, art, and literature. His death has left a void in the profession of this city, which will not soon be filled. Of the junior members who have died, the name of **Fountain** will now and ever be mentioned with the most sincere and heartfelt sorrow. In him were united genius and daring in an eminent degree. Whatever task he set his hand to was prosecuted with that energy and determination which overcome all obstacles. He fell a martyr, not to his love of experimentation, but to his unconquerable desire to establish beyond cavil, disputed points in the ever doubtful science of therapeutics. In his person, and at the expense of his life, he proved his own theory incorrect, and with his latest breath bequeathed to the profession the solution of the problem which had just been presented for its consideration. He left, however, a richer legacy to his brethren, in his example of untiring industry in the pursuit of truth.

The paralysis which has prostrated all literary pursuits has fallen heavily upon medical literature. Few medical books comparatively have been issued from the American press during the year. Works relating to military surgery have been somewhat numerous, and have met a remunerative sale, but there has been a decrease of original works, and also of reprints. The war has been especially fatal to medical journalism. We commenced the year with no fewer than thirty-five American medical journals on our exchange list, and we close it with but ten; the remainder we have reason to believe have been discontinued. Although it is undoubtedly true that there have been too many periodicals, still we can but consider it a misfortune to the profession that its periodical literature should have been so generally destroyed. Appeals to medical men for support at such times are altogether unavailing; the whole current of thought and interest is directed into other channels, and it is all in vain to attempt to divert it to the more ordinary duties and obligations of business. The political excitement of the times, the novelty of war, and the almost hourly succession of momentous events, have changed the whole tenor of every day life. Medical subjects and medical periodicals have appeared comparatively dull and uninteresting, however full of scientific matter. To complete the misfortunes of publishers we must add the loss of large numbers of subscribers at the South, and the enlistment of hundreds of Northern readers in the army, whose shifting regiments prevent the regular receipt of the mails. Those medical journals which maintain their regular issues in spite of such reverses deserve the encouragement and liberal support of the profession.

Finally, the organization of the Sanitary Commission, having as a basis a medical element, completes the record of events, for the year 1861, particularly interesting to our profession. We need not dwell upon its aims, and the results, thus far, of its labors. They are creditable in the highest degree to the far-seeing philanthropy of its projectors, and the energy with which they proceed to their accomplishment.

Such are briefly the principal medical events of the year 1861. Who dare lift the veil that conceals from our present knowledge the events of 1862!

THE WEEK.

Many of our readers will remember **Dr. Stephen Griswold** as a reputable young practitioner of this city, residing in Hudson street, and long connected with the Northern Dispensary. He was appointed Assistant Surgeon of the 38th Reg. N. Y. Vol., was taken prisoner at the battle of Bull Run, and after remaining at Richmond for a time, was sent to Charleston, where he died in the common jail of typhoid fever, Nov. 30, in the thirty-fourth year of his age. **Dr. Griswold** was a man of active temperament, of social habits, and had acquired a large influence in the Ninth Ward. He was one of the founders of the New York Library Association in Abingdon Square. His death under the present circumstances is deplorable.

A correspondent of *The Protestant Churchman*, a religious paper, which does not advertise quack medicines, writes from Port Royal as follows. The person mentioned was a former resident physician of Bellevue Hospital:

> "The men, in digging out anew a bomb-proof passage in the works, discovered a body, buried in the sand. A case of instruments, found in the hand, with bandages, etc., showed that it was a surgeon. On his handkerchief was the name of Buist; the same name is found on some medical books in the hospital. It is believed to have been a surgeon, formerly of the U. S. Army, who resigned to enter the service of the rebels. He was a man of high standing in his profession. It is evident that he was sitting on his camp-stool, in the bomb-proof passage, waiting to be in readiness when he was needed. A shell penetrated the bomb-proof to the timbers, and exploded directly above him, killing him, and burying him in the same instant. A gold watch was found on him, and his dress indicated affluence. One of his professional brethren gathered up his effects, and severed a lock of his hair, designing to send them across the lines to his family. We carried the body to a quiet spot in the woods, and there, by the twilight, a grave was dug, at the foot of a large tree, in a spot easily identified, a musket-box served as a coffin, and we gave him a christian burial. Those men he deemed his enemies mourned over him, and prayed for his bereaved home, remembering Christ's precept, to pray for them that hate us."

Dr. Tripler, Medical Director of the army of the Potomac, has made arrangements for the care of a large number of patients, whose condition may permit their removal from Washington and Baltimore to Philadelphia. A friend in the latter city writes: "The military hospitals here are now ready for the reception of patients. There are five of them, with an aggregate capacity for 1500 beds (640, 250, 275, 250, 80). The buildings, leased for the purpose, have been judiciously arranged." This provision for the removal and proper care of patients at a distance from the crowded hospitals on the Potomac, is an act of prudent foresight; and from the present aspect of affairs, connected with the expeditionary corps on the southern coast, the extensive prevalence already of diseases peculiar to that coast and to the army, it will be wise policy for the Government to make provisions in the port of New York similar to those it has completed in Philadelphia, for such patients and invalids as may need to be removed homewards. As this is the principal port of departure and return for all the steamers and transports connected with the southern coast expeditions, ample provisions should be made for the return and proper care of their disabled men in the immediate vicinity of the bay of New York.

A Committee of the Academy of Medicine, headed by **Dr. Detmold**, recently waited upon the surgeons of the French fleet now in the harbor of New York, and exchanged with them professional courtesies. Subsequently the surgeons of the fleet were entertained at **Dr. Anderson's**, and the New York Hospital.

Correspondence.

FOREIGN CORRESPONDENCE.

PARIS.

LETTER FROM C. Y. SWAN, M.D.

Nov. 17th, 1861.

It is quite evident that French doctors ignore the usual superstitions we still attach to hangman's day, for on last Friday took place the opening *séance* of the École de Médécine. I might say also, they ignore equally as well the sacredness of our Sabbath, for on that day, a few weeks back, was held the meeting of the National Medical Society.

This convention was exceeding interesting to witness, as it was composed of over three hundred of the picked men of France. M. Rayer, who is physician to the Emperor, and who looks so much like a North American Indian, presided, and the business of the society was accomplished with becoming dignity. Occasion was taken to anathematize quacks and homœopaths, good and strong, just as we do it, and after all the noble doctors adjourned to meet over a good dinner at the Hotel de Louvre, twenty francs the plate. Dr. Locock of London, was present, and gave one hundred francs to the bank of the society.

The commencement ceremonies are very different from ours; with us an occasion for giving instruction and good counsel, is here only a ridiculous merry-making affair. The time for the opening of the doors was one o'clock, but long before that hour the Place de l'École de Médécine, was thronged with Medicos from every clime, of every shade, age, and temperament that is possible to be imagined. The authorities, I am told, deal lightly with their delinquencies as a body, and in availing themselves of this comparative exemption, I fancied that I never got in a crowd where there was more hooting and yelling and unmannerly conduct in general. Finally, the gates opened, and when all were seated that could be in the amphitheatre, I expected peace, but, on the contrary, disorder continued until the entrée of the Janitor, holding in his hand the staff of Mercury, gave a new phase to matters. The students, some twelve hundred in number, with one accord, began chanting a kind of dead march, to the air of which twenty professors and as many agregés, in their brilliant robes, kept excellent step and filed into the arena where were their seats.

When the last professor had taken his seat the music subsided as if conducted by a Julien, and M. Dubois, the president, arose to make a statement which never reached to mortal ears. He was followed by M. Moquin-Zandon, who had been selected to deliver an eulogy on M. Dumeril, who had died within the year leaving vacant the chair of Natural History. The eulogy, that I have since seen in print, seems so different from that as delivered, that I can scarcely believe them the same. The conduct of the auditors was truly surprising to me, as at times it was impossible to hear even the voice of the lecturer amid the noise and confusion which prevailed. Nor was the authority of the President sufficient to check this show of disrespect to the lecturer, and the majority seemed, by their behavior, to take the whole as a matter of course. Some prize medals were then distributed, and the ceremony ended. Nothing was said or done but the reading of the eulogy, and I am told that nothing more is customary. As to how they do when no professor dies within the year, is not known; at all events, such a failure has not occurred in ten years. Old Velpeau, in particular, seemed sad and much annoyed by the misconduct of the students, and it is more than probable that he was thinking about the eulogy to take place after his own departure, and as to whether his memory would be treated with similar disrespect. He can barely expect better, as he has attended some fifty such affairs without ever probably witnessing any different or more respectful behavior.

In a recent conversation with Prof. Armsby of Albany, I learned that the itch prevailed to some extent among our soldiers, and as he doubted if the speedy method of cure as here practised was in general use, I beg leave to recall it to your knowledge.

It is about the only skin affection, upon the treatment of which the men of St. Louis Hospital agree. Bazin made the first progress a few years ago by contracting the time to two days, but Hardy followed fast, and now demands only one hour and a half to make *certain* cures. The Hospital administration are thus saved a considerable expenditure by such expeditious treatment, as none so afflicted are taken in. Saturday is the great itch day, and I have seen as many as sixty patients in one room, all nude, rubbing gaily their bodies and by turns their neighbor's back, to which he cannot himself do justice with soft soap (savon noir). This is called the *friction préparatoire*, and lasts for half an hour. The master of ceremonies, holding an immense baton, takes care that each performs well his rôle. The second part is to give them a half hour hot bath, which removes the dirt and softens the skin, and the third part, which is of the same duration, is to make general friction with the following pomade:—Axonge, 300, soufre, 50, sous-carb. de pot., 25. This ointment is allowed to remain on the body until the following day, for the purpose of disinfecting the patient's clothes.

Apropos, I might mention that an American is about to translate the very excellent work of Bazin on Parasites.

Medical News.

Call of Professor Moleschott to Turin.—The Minister of Public Instruction of the new kingdom of Italy, said to be an old friend of Professor Moleschott, offered this distinguished physiologist the choice of the Chair of Physiology at Turin University, or that of Physiological Chemistry at Pisa. As the former school numbers about 2000 students, and the latter about 200, it is not surprising he chose Turin for his sphere of action. A Dutchman by birth, but a distinguished German Professor for some time past, his appointment has been looked upon with extreme dislike in Italy, where the Germans are in such disfavor; but none of the Italian candidates for the post could pretend to vie with Moleschott in scientific reputation.—*Med. Times & Gaz.*

The Treatment of Child-Bed Fever.—In an epidemic of child-bed fever, which occurred some time ago in the obstetrical clinique of Professor Von Ritgen, the following plan of treatment was adopted, with exceedingly beneficial results, as even cases of the utmost severity were cured under its influence. At first ⅛th of a grain of morphia was given, and this dose repeated two, three, or even four times a-day, according to the violence of the abdominal pain. An hour after the dose of morphia, a mixture of camphor was administered (℞ Camphor. ℈ss., gummi mimos. ʒj., Aq. chamomill. ℥iij., liq. ammon. acet., sacch. albi, aa, ℥j.); an hour after this the patients took one grain of quinine; then another dose of morphia, and so on, until the symptoms decreased, which was the case with all patients hitherto treated in this manner.—*Med. Times & Gaz.*

Scientific Rewards to Physicians.—The lifetime of labor which Dr. Carpenter has bestowed on physiological science will meet with a public recognition in the bestowal of one of the Royal Medals at the disposal of the Council of the Royal Society at the approaching meeting. The immediate reasons set forth for the award are Dr. Carpenter's well-known researches on the Foraminifera, and on the Structure of Shells, as well as continued physiological research. —*Lancet.*

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